

## List of Publication 2022

Sr. No.	Authors	Title	Year	Source title	Volume	Issue	Page start	Page end
1	Sarwar M., Rasool B.	Seasonal occurrence and biological parameters of Aedes albopictus (Skuse) (Diptera: Culicidae) as management tactics in Faisalabad, Punjab, Pakistan [Ocurrencia estacional y parÁmetros biolÃ³gicos de Aedes albopictus (Skuse) (Diptera: Culicidae) como tÃ¡cticas de manejo en Faisalabad, Punjab, PakistÃ¡n]	2022	Revista de la Sociedad Entomologica Argentina	81	4	33	41
2	Aanish Ali M., Rehman N., Park T.J., Basit M.A.	Antiviral role of nanomaterials: a material scientist's perspective	2022	RSC Advances	13	1	47	79
3	Khan H.U., Aziz S., Maheen S., Khan I., Andleeb M., Younis H., Haider S., Haider A., Akhtar M.S., Shafqat S.S.	Superporous acrylic acid and HPMC hydrogels of mefenamic acid: Formulation, characterization and optimization by central composite design	2022	Frontiers in Bioengineering and Biotechnology	10			
4	Manzoor N., Ali L., Ahmed T., Rizwan M., Ali S., Shahid M.S., Schulin R., Liu Y., Wang G.	Silicon oxide nanoparticles alleviate chromium toxicity in wheat ( <i>Triticum aestivum</i> L.)	2022	Environmental Pollution	315			

5	Roohi M., Saleem Arif M., Guillaume T., Yasmeen T., Riaz M., Shakoor A., Hassan Farooq T., Muhammad Shahzad S., Bragazza L.	Role of fertilization regime on soil carbon sequestration and crop yield in a maize-cowpea intercropping system on low fertility soils	2022	Geoderma	428			
6	Rab Nawaz H.Z., Falak U., Naz T., Baig M.M., Mehmood Ahmad R.T., Rasheed A., Dastgeer G.	Synthesis of silver/silver oxide heterostructures via partial reduction of AgNO <sub>3</sub> using a novel green reducing agent	2022	Ceramics International	48	24	37194	37202
7	Ali A., Yu L., Kousar S., Khalid W., Maqbool Z., Aziz A., Arshad M.S., Aadil R.M., Trif M., Riaz S., Shaukat H., Manzoor M.F., Qin H.	Crocin: Functional characteristics, extraction, food applications and efficacy against brain related disorders	2022	Frontiers in Nutrition	9			
8	Mehmood M.S., Jian Z., Akram U., Akram Z., Tanveer Y.	Entrepreneurial leadership and team creativity: the roles of team psychological safety and knowledge sharing	2022	Personnel Review	51	9	2404	2425
9	Khan Abdul S., Anuj K., Amjad F., Muhammad T., Muhammad A., Muhammad U., Akmal A., Saira A., Lujun P., Ghulam Y.	Benchmarking the charge storage mechanism in nickel cobalt sulfide nanosheets anchored on carbon nanocoils/carbon nanotubes nano-hybrid for high performance supercapacitor electrode	2022	Journal of Energy Storage	56			

10	Nosheen A., Ashraf M., Hussain M.T., Aziz H., Tahir M.F., Akram S.	Development of functional cotton fabric by simultaneous dyeing and finishing with a novel bioactive reactive dye	2022	New Journal of Chemistry	47	4	1872	1886
11	Siddique Z., Payne J.L., Sajjad M.T., Mica N., Cordes D.B., Slawin A.M.Z., Samuel I.D.W., Iqbal A., Irvine J.T.S.	Synthesis and optical characterization of lead-free phenylenediammonium bismuth halide perovskites: a long charge carrier lifetime in phenylenediammonium bismuth iodide	2022	Journal of Materials Chemistry C	11	1	223	234
12	Ali S., Ahmed S.	Information Literacy Skills among Library and Information Science Professionals: a forecaster of Research Support Services	2022	Library Hi Tech	40	6	1689	1704
13	Hussain H., Xiao J., Ali A., Green I.R., Westermann B.	Unusually cyclized triterpenoids: occurrence, biosynthesis and chemical synthesis	2022	Natural Product Reports	40	2	412	451
14	Pasha A.R., Abbas N., Ahmed H.N.	Epenthesis: The Movement of the Urdu Alveolar-Fricative Sound into the Punjabi Palatal-Affricate Sound	2022	Engineering, Technology and Applied Science Research	12	6	9487	9490
15	Ali A., Amjad N., Javed F., Zain-Ul-abbas, Muzammil S., Ahmad M.Z., Oranab S., Umar M., Sajid M.	Presence and Antibiotic Resistance of MDR Salmonella Isolates Recovered from Zea mays L. Farms Located near the Poultry Farms in Faisalabad-Pakistan	2022	Advancements in Life Sciences	9	4	516	520

16	Ahmad H.M., Alafari H.A., Fiaz S., Alshaya D.S., Toor S., Ijaz M., Rasool N., Attia K.A., Zaynab M., Azmat S., Abushady A.M., Chen Y.	Genome-wide comparison and identification of myosin gene family in <i>Arabidopsis thaliana</i> and <i>Helianthus annuus</i>	2022	Heliyon	8	12		
17	Urainab S., Kamal S., Vagif S.M., Mahreen A., Zafar S.	Geranyl flavanone from <i>Feronia limonia</i> (L.) Swingle	2022	Herba Polonica	68	4	20	24
18	Khalid A., Nadeem T., Khan M.A., Ali Q., Zubair M.	In vitro evaluation of immunomodulatory, anti-diabetic, and anti-cancer molecular mechanisms of <i>Tribulus terrestris</i> extracts	2022	Scientific Reports	12	1		
19	Yasmeen S., Wahab A., Saleem M.H., Ali B., Qureshi K.A., Jaremko M.	Melatonin as a Foliar Application and Adaptation in Lentil ( <i>Lens culinaris</i> Medik.) Crops under Drought Stress	2022	Sustainability (Switzerland)	14	24		
20	Mehmood Y., Shahid H., Rashid M.A., Alhamhoon Y., Kazi M.	Developing of SiO <sub>2</sub> Nanoshells Loaded with Fluticasone Propionate for Potential Nasal Drug Delivery: Determination of Pro-Inflammatory Cytokines through mRNA Expression	2022	Journal of Functional Biomaterials	13	4		
21	Yu J., Ju F., Wahab M., Agyekum E.B., Matasane C., Uhunamure S.E.	Estimating the Effects of Economic Complexity and Technological Innovations on CO <sub>2</sub> Emissions: Policy Instruments for N-11 Countries	2022	Sustainability (Switzerland)	14	24		

22	Akram R., Anwar H., Javed M.S., Rasul A., Imran A., Malik S.A., Raza C., Khan I.U., Sajid F., Iman T., Sun T., Han H.S., Hussain G.	Axonal Regeneration: Underlying Molecular Mechanisms and Potential Therapeutic Targets	2022	Biomedicines	10	12		
23	Zubair H., Saqib M., Khan M.N., Shamas S., Irfan S., Shahab M.	Variation in Hypothalamic GnIH Expression and Its Association with GnRH and Kiss1 during Pubertal Progression in Male Rhesus Monkeys ( <i>Macaca mulatta</i> )	2022	Animals	12	24		
24	Imran M., Hussain G., Hameed A., Iftikhar I., Ibrahim M., Asghar R., Nisar I., Farooq T., Khalid T., Rehman K., Assiri M.A.	Metabolites of <i>Moringa oleifera</i> Activate Physio-Biochemical Pathways for an Accelerated Functional Recovery after Sciatic Nerve Crush Injury in Mice	2022	Metabolites	12	12		
25	Shahid M., Rehman K., Akash M.S.H., Suhail S., Kamal S., Imran M., Assiri M.A.	Genetic Polymorphism in Angiotensinogen and Its Association with Cardiometabolic Diseases	2022	Metabolites	12	12		
26	Mohsin N.U.A., Aslam S., Ahmad M., Irfan M., Al-Hussain S.A., Zaki M.E.A.	Cyclooxygenase-2 (COX-2) as a Target of Anticancer Agents: A Review of Novel Synthesized Scaffolds Having Anticancer and COX-2 Inhibitory Potentialities	2022	Pharmaceuticals	15	12		

27	Munir S., Khurshid M., Ahmad M., Ashfaq U.A., Zaki M.E.A.	Exploring the Antimicrobial and Pharmacological Potential of NF22 as a Potent Inhibitor of E. coli DNA Gyrase: An In Vitro and In Silico Study	2022	Pharmaceutics	14	12		
28	Rasheed U., Imran M., Shakoor A., Niaz N.A., Hussain F., Khalil R.M.A., Alkhedher M., Eldin S.M.	Theoretical Investigation of Origin of Quantized Conduction in 2D Layered Ruddlesonâ€“Popper Perovskite Heterostructure for the RRAM Applications	2022	Energies	15	24		
29	Qadir M.B., Jalalah M., Shoukat M.U., Ahmad A., Khaliq Z., Nazir A., Anjum M.N., Rahman A., Khan M.Q., Tahir R., Faisal M., Alsaiari M., Irfan M., Alsareii S.A., Harraz F.A.	Nonwoven/Nanomembrane Composite Functional Sweat Pads	2022	Membranes	12	12		
30	Alanazi A.S., Victor F., Rehman K., Khan Y.H., Yunusa I., Alzarea A.I., Akash M.S.H., Mallhi T.H.	Pre-Existing Diabetes Mellitus, Hypertension and Kidney Disease as Risk Factors of Pre-Eclampsia: A Disease of Theories and Its Association with Genetic Polymorphism	2022	International Journal of Environmental Research and Public Health	19	24		
31	Sarfraz W., Farid M., Khalid N., Rizvi Z.F., Asam Z.Z., Nazir A., Naeem N., Farid S., Ali S.	Ameliorative role of foliar Zn-lysine application on wheat ( <i>Triticum aestivum L.</i> ) stressed by Tannery Wastewater	2022	Physiology and Molecular Biology of Plants	28	45608	2099	2110

32	Shahzadi I., Zahoor A.F., TÃ¼zÃ¼n B., Mansha A., Anjum M.N., Rasul A., Irfan A., Kotwica-Mojzych K., Mojzych M.	Repositioning of aceylline as anti-cancer drug: Synthesis, anticancer and computational studies of azomethines derived from aceylline tethered 4-amino-3- mercapto-1,2,4-triazole	2022	PLoS ONE	17	45638		
33	Ijaz M., Ansari M.-U.-R., Alafari H.A., Iqbal M., Alshaya D.S., Fiaz S., Ahmad H.M., Zubair M., Ramzani P.M.A., Iqbal J., Abushady A.M., Attia K.	Citric acid assisted phytoextraction of nickle from soil helps to tolerate oxidative stress and expression profile of NRAMP genes in sunflower at different growth stages	2022	Frontiers in Plant Science	13			
34	Akram M., Majeed M.I., Nawaz H., Rashid N., Javed M.R., Ali M.Z., Raza A., Shakeel M., Hasan H.M.U., Ali Z., Ehsan U., Shahid M.	Surface-enhanced Raman spectroscopy for characterization of filtrate portions of blood serum samples of typhoid patients	2022	Photodiagnosis and Photodynamic Therapy	40			
35	Khan A.Z., Malik S., Mehmood M.A., Shahid A., Shahzad T., Zhao X.-Q., Bai F.-W., Liu C.-G.	Two-stage algal cultivation for the biotransformation of urban wastewater's pollutants into multiple bioproducts in a circular bioeconomy paradigm	2022	Energy Conversion and Management	273			
36	Soares L.T.X.M.G., Basso M.A.F., dos Santos C.M.R., Ali A., Vasconcelos L.G., Dall'Oglio E.L., Sampaio	Binding Properties of Photosynthetic Herbicides: Photosynthetic Activity and Molecular Docking Approach towards 1,4-Dihydropyridines Derivatives	2022	Chemistry and Biodiversity	19	12		

	O.M., Vieira L.C.C.						
37	Asghar I., Younus S., Islam E., Iqbal S., Afzal M., Boopathy R., Amin M., Jambi E.J., Mahmood M.A.	A Comparative Study of the Treatment Efficiency of Floating and Constructed Wetlands for the Bioremediation of Phenanthrene-Contaminated Water	2022	Applied Sciences (Switzerland)	12	23	
38	Waqas H., Khan S.A., Yasmin S., Liu D., Imran M., Muhammad T., Alhushaybari A., Farooq U.	Galerkin finite element analysis for buoyancy driven copper-water nanofluid flow and heat transfer through fins enclosed inside a horizontal annulus: Applications to thermal engineering	2022	Case Studies in Thermal Engineering	40		
39	Ashraf S., Ahmad S.R., Ali Q., Ashraf S., Majid M., Zahir Z.A.	Acidified Cow Dung-Assisted Phytoextraction of Heavy Metals by Ryegrass from Contaminated Soil as an Eco-Efficient Technique	2022	Sustainability (Switzerland)	14	23	
40	Yusaf A., Usman M., Ahmad M., Siddiq M., Mansha A., Al-Hussain S.A., Zaki M.E.A., Rehman H.F.	Highly Selective Methodology for Entrapment and Subsequent Removal of Cobalt (II) Ions under Optimized Conditions by Micellar-Enhanced Ultrafiltration	2022	Molecules	27	23	

41	Khalid W., Arshad M.S., Nayik G.A., Alfarraj S., Ansari M.J., GuinÃ© R.P.F.	Impact of Gamma Irradiation and Kale Leaf Powder on Amino Acid and Fatty Acid Profiles of Chicken Meat under Different Storage Intervals	2022	Molecules	27	23		
42	Zafar A., Khosa M.K., Noor A., Qayyum S., Saif M.J.	Carboxymethyl Cellulose/Gelatin Hydrogel Films Loaded with Zinc Oxide Nanoparticles for Sustainable Food Packaging Applications	2022	Polymers	14	23		
43	Batool F., Irfan A., Al-Hussain S.A., Al-Farraj E.S., Iqbal S., Akbar J., Noreen S., Akhtar T., Iqbal T., Zaki M.E.A.	Development of Ion Character Property Relationship (IC-PR) for Removal of 13-Metal Ions by Employing a Novel Green Adsorbent <i>Aerva javanica</i>	2022	Molecules	27	23		
44	Bajaber M.A., Anjum M.N., Ibrahim M., Farooq T., Ahmad M.N., Abideen Z.U.	Synthesis and Characterization of Hydroxyethyl Cellulose Grafted with Copolymer of Polyaniline and Polypyrrole Biocomposite for Adsorption of Dyes	2022	Molecules	27	23		
45	Latif A., Azam S., Shahid N., Javed M.R., Haider Z., Yasmeen A., Sadaqat S., Shad M., Husnain T., Rao A.Q.	Overexpression of the AGL42 gene in cotton delayed leaf senescence through downregulation of NAC transcription factors	2022	Scientific Reports	12	1		

46	Hanif M., Farhan M., Sharif A., Paracha K.N., Ijaz U.	Glasses frame-based wearable antenna design for ultrahigh frequency radio frequency identification and Internet of Things applications using characteristic mode analysis	2022	International Journal of RF and Microwave Computer-Aided Engineering	32	12		
47	Ishaq A.R., El-Nashar H.A.S., Younis T., Mangat M.A., Shahzadi M., Ul Haq A.S., El-Shazly M.	Genus Lupinus (Fabaceae): a review of ethnobotanical, phytochemical and biological studies	2022	Journal of Pharmacy and Pharmacology	74	12	1700	1717
48	Akhter N., Aqeel M., Maqsood M.F., Nawaz S., Shahnaz M.M., Khalid N., Basahi M.A., Al-Zoubi O.M., Habeeb T., Marc R.A., Irshad M.K., Noman A.	Comparative Assessment of Remediation Potential of Xanthium strumarium Ecotypes in NaCl-Affected Root Zone	2022	Water, Air, and Soil Pollution	233	12		
49	Khan I.T., Nadeem M., Ullah R., Imran M.	Triglyceride, fatty acid profile, antioxidant characteristics, vitamins, lipid oxidation and induction period of ice cream produced from cow and Buffalo Milk	2022	Journal of Food Processing and Preservation	46	12		
50	Mushtaq F., Akhtar M.F., Saleem A., Sharif A., Akhtar B., El Askary A., Abdel-Daim M.M., Javaid Z., Sohail K., Anwar F.	Berberis aristata DC Extract Counteracts the High Fat Diet-Induced Reproductive Toxicity in Female Wistar Rats via Modulating Oxidative Stress and Resistance to Leptin and Insulin	2022	Endocrine, Metabolic and Immune Disorders - Drug Targets	22	14	1390	1402

51	Shakoori M.A., He M., Shahzad A., Khan M.	Diffusion coefficients of electrorheological complex (dusty) plasmas	2022	Journal of Molecular Modeling	28	12		
52	Farooq T., Akram M.N., Hameed A., Ahmed T., Hameed A.	Nanoprimer-mediated memory imprints reduce salt toxicity in wheat seedlings by modulating physiobiochemical attributes	2022	BMC Plant Biology	22	1		
53	Khan J.A., Ahmad J., Bukhari S.H., Nissar U.	Effect of A-site Gd <sup>3+</sup> substitution on structural, optical and electrical properties of La <sub>2-x</sub> GdxCrMnO <sub>6</sub> double perovskites	2022	Physica Scripta	97	12		
54	Khalid A., Imran M., Ali A., Muzammil S., Badar M., Hayat S., Malik I.R.	MOLECULAR MARKER (PCR-RFLP) ASSISTED IDENTIFICATION OF MEAT SPECIES BY MITOCHONDRIAL CYTOCHROME C OXIDASE SUBUNIT I (COI) GENE	2022	Journal of Animal and Plant Sciences	32	6	1724	1730
55	Mungmupuntipantip R., Wiwanitkit V.	Split-dosing of coronavirus disease 2019 vaccines	2022	Annals of Allergy, Asthma and Immunology	129	6	799	
56	Amalanathan M., Aravind M., Ahmed N., Sony Michel Mary M., Velusamy P., Kumaresubitha T., Noreen R., Ali S.	The influence of activated carbon annealing temperature on sunlight-driven photocatalytic dye degradation and biological activity	2022	Inorganic Chemistry Communications	146			

57	Mukhtar I., Anwar H., Iftikhar A., Hashem H.E., Ali Q., Siddique F.	Human targeted phenobarbital presents a poor substrate of gut microbiome deciphering new drug targets beyond pharmacokinetic curbs	2022	BMC Pharmacology and Toxicology	23	1		
58	Rehman A., Noor F., Fatima I., Qasim M., Liao M.	Identification of molecular mechanisms underlying the therapeutic effects of Celosia Cristata on immunoglobulin nephropathy	2022	Computers in Biology and Medicine	151			
59	Bilal M., Noor N.A., Iqbal M.W., Khan M.A., Niaz S., Sohail A., Alanazi Y.M., Aftab S., Neffati R.	New magnesium based half-metallic ferromagnetic chalcogenide MgFe <sub>2</sub> Z <sub>4</sub> (Z = S, Se) spinels; a promising materials for spintronic applications	2022	Physica Scripta	97	12		
60	Sookaromdee P., Wiwanitkit V.	VDR gene polymorphisms and susceptibility to COVID-19: Correspondence	2022	International Journal of Immunogenetics	49	6	384	
61	Sohail M., Nazir U., Naz S., Singh A., Mukdasai K., Ali M.R., Khan M.J., Galal A.M.	Utilization of Galerkin finite element strategy to investigate comparison performance among two hybrid nanofluid models	2022	Scientific Reports	12	1		
62	Ghanem M., Rasheed R., Almousawi A., Ali R., Usmani S.	Redefining the clinical axillary lymph node staging using SPECT/CT in early breast cancer during SLNB	2022	Egyptian Journal of Radiology and Nuclear Medicine	53	1		

63	Khan I., Awan S.A., Rizwan M., Hassan Z.U., Akram M.A., Tariq R., Brestic M., Xie W.	Nanoparticleâ€™s uptake and translocation mechanisms in plants via seed priming, foliar treatment, and root exposure: a review	2022	Environmental Science and Pollution Research	29	60	89823	89833
64	Bashir M., Majid F., Sabir R., Falak A., Khan B.S., Mahmood T., Fouda A.M., Ali A.	Facile green synthesis, analysis, in vitro antidiabetic and antimicrobial activity of ZnO macropores	2022	Bioprocess and Biosystems Engineering	45	12	1993	2006
65	Raza Shah Naqvi S.M., Waqas H., Yasmin S., Liu D., Muhammad T., Eldin S.M., Khan S.A.	Numerical simulations of hybrid nanofluid flow with thermal radiation and entropy generation effects	2022	Case Studies in Thermal Engineering	40			
66	Abbas N., Pan X., Raheem A., Shakoor R., Arfeen Z.A., Rashid M., Umer F., Safdar N., Liu X.	Real-time robust generalized dynamic inversion based optimization control for coupled twin rotor MIMO system	2022	Scientific Reports	12	1		
67	Khaliq N., Bibi I., Majid F., Arshad M.I., Ghafoor A., Nazeer Z., Ezzine S., Alwadai N., Nazir A., Iqbal M.	Mg <sub>1-x</sub> Ni <sub>x</sub> Fe <sub>2-x</sub> Cr <sub>x</sub> O <sub>4</sub> synthesis via hydrothermal route: Effect of doping on the structural, optical, electrical, magnetic and photocatalytic properties	2022	Results in Physics	43			
68	Shakoor A., Farooq T.H., Arif M.S., Shahzad S.M.	Floods wreak havoc in Pakistan: A deadly reality of climate change exposing frailty of global response efforts	2022	Ecological Informatics	72			

69	Iqbal S., Kiran S., Anwar A., Abrar S., Khalid A., Moloney M.G., Akhtar M.N.	An Overview of Synthetic Routes of Pharmaceutically Important Pyranopyrazoles	2022	Current Medicinal Chemistry	29	41	6288	6333
70	Shakeel M., Majeed M.I., Nawaz H., Rashid N., Ali A., Haque A., Akbar M.U., Tahir M., Munir S., Ali Z., Shahbaz M., Saleem M.	Surface-enhanced Raman spectroscopy for the characterization of pellets of biofilm forming bacterial strains of <i>Staphylococcus epidermidis</i>	2022	Photodiagnosis and Photodynamic Therapy	40			
71	Hussain M., Jahan S., Ranjha Q.A., Ahmad J., Jamil M.K., Ali A.	Suction/blowing impact on magneto-hydrodynamic mixed convection flow of Williamson fluid through stretching porous wedge with viscous dissipation and internal heat generation/absorption	2022	Results in Engineering	16			
72	Ahmad N., Anwar F., Abbas A., Shahid M., Tian M., Zhao C., Al-Mijalli S.H., Farhat L.B., Iqbal M.	Nutra-pharmaceutical potential and phytonutrients profiling of wild jujube fruits along with bioactivities studies	2022	Arabian Journal of Chemistry	15	12		

73	Khaliq M.A., Javed M.T., Hussain S., Imran M., Mubeen M., Nasim W., Fahad S., Karuppannan S., Al-Taisan W.A., Almohamad H., Al Dughairi A.A., Al-Mutiry M., Alrasheedi M., Abdo H.G.	Assessment of heavy metal accumulation and health risks in okra ( <i>Abelmoschus Esculentus L.</i> ) and spinach ( <i>Spinacia Oleracea L.</i> ) fertigated with wastewater	2022	International Journal of Food Contamination	9	1		
74	Ghani U., Hina K., Iqbal M., Irshad M.K., Aslam I., Saeed R., Ibrahim M.	Kinetic and isotherms modeling of methyl orange and chromium (VI) onto hexagonal ZnO microstructures as a membrane for environmental remediation of wastewater	2022	Chemosphere	309			
75	Ali N., Zhang L., Liu D., Zhou H., Sanaullah K., Zhang C., Chu J., Nian Y., Cheng J.	Strengthening mechanisms in high entropy alloys: A review	2022	Materials Today Communications	33			
76	Masood S., Khan K.S., Ashraf M., Iqbal M., Mustafa G., Ali L., Hussain Q., Javed M.T., Ahmed N., Jamil M.	Iron supply confers tolerance in rice ( <i>Oryza sativa L.</i> ) to NaCl stress due to up-regulation of antioxidative enzymatic activity	2022	South African Journal of Botany	151	315	324	
77	Ahmad N., Anwar F., Zuo Y., Aslam F., Shahid M., Abbas A., Farhat L.B., H.	Wild olive fruits: Phenolics profiling, antioxidants, antimicrobial, thrombolytic and haemolytic activities	2022	Arabian Journal of Chemistry	15	12		

	Al-Mijalli S., Iqbal M.							
78	Ikram M., Shujait S., Haider A., Kashaf-Ul-Ain, Ul-Hamid A., Haider J., Shahzadi I., Nabgan W., Imran M., Butt A.R.	Molybdenum and chitosan-doped MnO <sub>2</sub> nanostructures used as dye degrader and antibacterial agent	2022	Applied Nanoscience (Switzerland)	12	12	3909	3924
79	Batool A., Shah K.H., Hussain S., Hussain Z., Naqvi S.A.R., Sherazi T.A.	L-Histidine immobilized montmorillonite for As(III) adsorption and statistical verification of data by PDF, AICcorrected and AADR models	2022	Applied Water Science	12	12		
80	Iqbal N., Zubair H.M., Almutairi M.H., Abbas M., Akhtar M.F., Aleya L., Kamel M., Saleem A., Jabeen Q., Noreen S., Baig M.M.F.A., Abdel-Daim M.M.	Hepatoprotective effect of Cordia rothii extract against CCl <sub>4</sub> -induced oxidative stress via Nrf2–NFκB pathways	2022	Biomedicine and Pharmacotherapy	156			
81	Aamir M., Saleem A., Rakha A., Nadeem M., Ateeq H., Saeed F., Asghar A., Shah Y.A., Afzaal M., Javed A., Tufail T., Qamar A.	Functional utilization of mango waste for improving the nutritional and sensorial properties of multigrain cookies	2022	Journal of Food Processing and Preservation	46	12		

82	Khalid M.A., Hussain S.M., Mahboob S., Al-Ghanim K.A., Riaz M.N.	Biochar as a feed supplement for nutrient digestibility and growth performance of Catla catla fingerlings	2022	Saudi Journal of Biological Sciences	29	12		
83	Zafar Khan A., Haider M.N., Zhao X.-Q., Bai F.-W., Musharraf S.G., Ahmad N., Mehmood M.A., Liu C.-G.	Evaluation of resource recovery potential of the <i>Pseudoscillatoria coralii</i> BERCO1 under variable compositions of wastewater to produce biomass for cyanobacterium biorefinery	2022	Sustainable Energy Technologies and Assessments	54			
84	Shahid M.N.	COVID-19 and adaptive behavior of returns: evidence from commodity markets	2022	Humanities and Social Sciences Communications	9	1		
85	Amin A., Akhtar M.F., Saleem A., Sharif A., Shah S., Khan M.I., Anwar F., Abbas G., Zubair H.M., Sohail M.F.	Pterostilbene improves CFA-induced arthritis and peripheral neuropathy through modulation of oxidative stress, inflammatory cytokines and neurotransmitters in Wistar rats	2022	Inflammopharmacology	30	6	2285	2300
86	Amin S., Sher M., Ali A., Rehman M.F., Hayat A., Ikram M., Abbas A., Amin H.M.A.	Sulfonamide-functionalized silver nanoparticles as an analytical nanoprobe for selective Ni(II) sensing with synergistic antimicrobial activity	2022	Environmental Nanotechnology, Monitoring and Management	18			
87	Fatima Haq F., Mahmood H., Iqbal T., Measam Ali M., Jafar Khan M., Moniruzzaman M.	Development of sustainable biocomposite panels assisted with deep eutectic solvent pretreatment of agro-industrial residue	2022	Journal of Molecular Liquids	367			

88	Nosheen F., Malik N., Mehmood Z., Jabeen F., Mahmood A., Ibrahim M., Bokhari A., Mubashir M., Chuah L.F., Show P.L.	Biomedical waste management associated with infectious diseases among health care professionals in apex hospitals of a typical south asian city	2022	Environmental Research	215			
89	Hafeez A., Rasheed R., Ashraf M.A., Rizwan M., Ali S.	Effects of exogenous taurine on growth, photosynthesis, oxidative stress, antioxidant enzymes and nutrient accumulation by <i>Trifolium alexandrinum</i> plants under manganese stress	2022	Chemosphere	308			
90	Babar Q., Saeed A., Tabish T.A., Pricl S., Townley H., Thorat N.	Novel epigenetic therapeutic strategies and targets in cancer	2022	Biochimica et Biophysica Acta - Molecular Basis of Disease	1868	12		
91	Naz I., Masoud M.S., Chauhdary Z., Shah M., Panichayupakaranant P.	Anti-inflammatory potential of berberine-rich extract via modulation of inflammation biomarkers	2022	Journal of Food Biochemistry	46	12		
92	Mungmunpuntipantip R., Wiwanitkit V.	Asthma 17q21 polymorphism and risk of COVID-19 in children: Correspondence	2022	Pediatric Pulmonology	57	12	3177	
93	Saeed F., Afzaal M., Shah Y.A., Khan M.H., Hussain M., Ikram A., Ateeq H., Noman M., Saewan S.A., Khashroum A.O.	Miso: A traditional nutritious & health-endorsing fermented product	2022	Food Science and Nutrition	10	12	4103	4111

94	Khan N.A., Alnuwaiser M.A., Javed M.R., Ikram S., Ali A., Ali M.Y., Amami M., Nawaz M.A., Javaid K., Hussain M.S., Mahmood K.	Effect of Sn concentration on the structural, morphological and thermoelectric transport properties of zinc Stannates thin films	2022	Ceramics International	48	23	35237	35240
95	Hussain B., Sajad M., Usman H., A. Al-Ghanim K., Riaz M.N., Berenjian A., Mahboob S., Show P.L.	Assessment of hepatotoxicity and nephrotoxicity in Cirrhinus mrigala induced by trypan blue - An azo dye	2022	Environmental Research	215			
96	Sun L., Li J., Liu Y., Noman A., Chen L., Liu J.	Transcriptome profiling in rice reveals a positive role for OsNCED3 in defense against the brown planthopper, Nilaparvata lugens	2022	BMC Genomics	23	1		
97	Nazeer M., Hussain F., Ghafar M.M., Javed M.A.	Investigation of electro-osmotic flow of Hafnium particles mixed-up with Casson fluid in convergent geometry: Theoretical study of multiphase flow	2022	Partial Differential Equations in Applied Mathematics	6			
98	Malik L., Sanaullah M., Mahmood F., Hussain S., Siddique M.H., Anwar F., Shahzad T.	Unlocking the potential of co-applied biochar and plant growth-promoting rhizobacteria (PGPR) for sustainable agriculture under stress conditions	2022	Chemical and Biological Technologies in Agriculture	9	1		

99	Akhtar R., Zahoor A.F., Irfan M., Bokhari T.H., ul Haq A.	Recent green synthetic approaches toward Ullmann reaction: a review	2022	Chemical Papers	76	12	7275	7293
100	Faiz M., Habib D., Siddique I., Awrejcewicz J., Pawłowski W., Abdal S., Salamat N.	Multiple slip effects on time dependent axisymmetric flow of magnetized Carreau nanofluid and motile microorganisms	2022	Scientific Reports	12	1		
101	Fareed F., Saeed F., Afzaal M., Imran A., Ahmad A., Mahmood K., Shah Y.A., Hussain M., Ateeq H.	Fabrication of electrospun gum Arabicâ€“polyvinyl alcohol blend nanofibers for improved viability of the probiotic	2022	Journal of Food Science and Technology	59	12	4812	4821
102	Shahzad K., Khan M.N., Jabeen F., Chaudhry A.S., Khan M.K.A., Ara C., Khan M.S.	Study of Some Toxicological Aspects of Titanium Dioxide Nanoparticles Through Oxidative Stress, Genotoxicity, and Histopathology in Tilapia, <i>Oreochromis mossambicus</i>	2022	BioNanoScience	12	4	1116	1124
103	Ashfaq M., Rasheed A., Sajjad M., Ali M., Rasool B., Javed M.A., Allah S.U., Shaheen S., Anwar A., Ahmad M.S., Mubashar U.	Genome wide association mapping of yield and various desirable agronomic traits in Rice	2022	Molecular Biology Reports	49	12	11371	11383

104	Farooq U., Tahir M., Waqas H., Muhammad T., Alshehri A., Imran M.	Investigation of 3D flow of magnetized hybrid nanofluid with heat source/sink over a stretching sheet	2022	Scientific Reports	12	1		
105	Akash M.S.H., Sharif H., Rehman K., Rasheed S., Kamal S.	Biochemical Profiling of Arsenic Trioxide-Induced Impaired Carbohydrate Metabolism and its Therapeutic Intervention via Modulation of Metabolic Pathways	2022	Pakistan Journal of Zoology	54	6	2835	2844
106	Ur Rehman S., Farooq M., Qamar A., Usman M., Ahmad G., Sultan M., Wajid Saleem M., Hussain I., Imran M., Ali Q., Yasar Javaid M., Siddiqui F.A.	Experimental investigation to thermal performance of different photo voltaic modules for efficient system design	2022	Alexandria Engineering Journal	61	12	12623	12634
107	Safdar M., González-Castaño M., Penkova A., Centeno M.A., Odriozola J.A., Arellano-García H.	CO <sub>2</sub> methanation on Ni/YMn <sub>1-x</sub> Al <sub>x</sub> O <sub>3</sub> perovskite catalysts	2022	Applied Materials Today	29			
108	Hussain M., Saeed F., Javed M., Afzaal M., Niaz B., Imran A., Naz A., Umar M.	Extraction and characterization of cereal bran cell wall in relation to its end use perspectives	2022	Journal of Food Science and Technology	59	12	4615	4623

109	Sidra, Tabasum S., Zia K.M., Parveen B., Shahid M.	Polyurethane dispersions prepared from vegetable oil and their application as textile finishes	2022	Textile Research Journal	92	23-24	4639	4651
110	Shahzad S., Saeed M., Perveen S., Azeem M., Sajjad I., Saeed S., Naeem M., Javed A., Sultan I., Faria U., Maryam S., Yousaf M.Z.	Genetic diversity and population structure assessed through simple sequence repeat markers in <i>Saccharum</i> spp. hybrids from Pakistan and Sri Lanka	2022	Genetic Resources and Crop Evolution	69	8	2889	2900

	Mogharab V., Ostovar M., Ruszkowski J., Hussain S.Z.M., Shrestha R., Yaqoob U., Aryanpoor P., Nikkhoo A.M., Heidari P., Jahromi A.R., Rayatdoost E., Ali A., Javdani F., Farzaneh R., Ghanaatpisheh A., Habibzadeh S.R., Foroughian M., Ahmadi S.R., Akhavan R., Abbasi B., Shahi B., Hakemi A., Bolvardi E., Bagherian F., Motamed M., Boroujeni S.T., Jamalnia S., Mangouri A., Paydar M., Mehrasa N., Shirali D., Sanmarchi F., Saeed A., Jafari N.A., Babou A., Kalani N., Hatami N.	Global burden of the COVID-19 associated patient-related delay in emergency healthcare: a panel of systematic review and meta-analyses	2022	Globalization and Health			
111	Fatima I., Ahmad S., Alamri M.A., Mirza M.U., Tahir ul Qamar M., Rehman A., Shahid F., Alatawi E.A., Alkhayl F.F.A., Al-Megrin W.A., Almatroudi A.	Discovery of Rift Valley fever virus natural pan-inhibitors by targeting its multiple key proteins through computational approaches	2022	Scientific Reports	18	1	
112							

113	Alqarni M.S., Yasmin S., Waqas H., Khan S.A.	Recent progress in melting heat phenomenon for bioconvection transport of nanofluid through a lubricated surface with swimming microorganisms	2022	Scientific Reports	12	1		
114	Waqas H., Khan S.A., Farooq U., Muhammad T., Alshehri A., Yasmin S.	Thermal transport analysis of six circular microchannel heat sink using nanofluid	2022	Scientific Reports	12	1		
115	Rafeeq H., Hussain A., Ambreen A., Zill-e-Huma, Waqas M., Bilal M., Iqbal H.M.N.	Functionalized nanoparticles and their environmental remediation potential: a review	2022	Journal of Nanostructure in Chemistry	12	6	1007	1031
116	Rehman U., Mansha A., Zahid M., Asim S., Zahoor A.F., Rehan Z.A.	Quantum mechanical modeling unveils the effect of substitutions on the activation barriers of the Dielsâ€“Alder reactions of an antiviral compound 7H-benzo[a]phenalene	2022	Structural Chemistry	33	6	1907	1920
117	Jiang C., Rashid M.A.R., Zhang Y., Zhao Y., Pan Y.	Genome wide association study on development and evolution of glutinous rice	2022	BMC Genomic Data	23	1		
118	Athar M.H., Naqvi S.M.A., Ali H.O., Rafique F., Ammar M., Waqar M., Husnain F., Nadeem M.T., Waqas M.	Investigation on Local Gas Content For Upward Airâ€“Water Two-Phase Flow And Comparison With Classical Void Fraction Calculation Models	2022	Arabian Journal for Science and Engineering	47	12	16001	16013

119	Haq A., Saeed M., Muneer M., Jamal M.A., Maqbool T., Tahir T.	Biosorption of metribuzin pesticide by Cucumber ( <i>Cucumis sativus</i> ) peels-zinc oxide nanoparticles composite	2022	Scientific Reports	12	1		
120	Waqas H., Naeem H., Manzoor U., Sivasankaran S., Ayyad Alharbi A., Saleh Alshomrani A., Muhammad T.	Impact of electro-magneto-hydrodynamics in radiative flow of nanofluids between two rotating plates	2022	Alexandria Engineering Journal	61	12	10307	10317
121	Farooq T., Nisa Z.U., Hameed A., Ahmed T., Hameed A.	Priming with copper-chitosan nanoparticles elicit tolerance against PEG-induced hyperosmotic stress and salinity in wheat	2022	BMC Chemistry	16	1		
122	Raza Shah Naqvi S.M., Farooq U., Waqas H., Muhammad T., Alshehri A.	Inspection of thermal jump conditions on nanofluids with nanoparticles and multiple slip effects	2022	Scientific Reports	12	1		
123	Abbas Q., Arooj N., Baig K.B., Khan M.U., Khalid M., Shahzadi M.	A clinical trial of cognitive behavior therapy for psychiatric comorbidity and quality of life with Cancer Patients during Chemotherapy (CPdC)	2022	BMC Psychiatry	22	1		
124	Farooq U., Waqas H., Shah Z., Kumam P., Deebani W.	On unsteady 3D bio-convection flow of viscoelastic nanofluid with radiative heat transfer inside a solar collector plate	2022	Scientific Reports	12	1		

125	Nawaz R., Naqvi S.T.R., Fatima B., Zulfiqar N., Farooq M.U., Haq M.N., Hussain D., Javeed A., Rasul A., Jafri L., Majeed S., Khan W.Q.	Cost-effective fabrication, antibacterial application and cell viability studies of modified nonwoven cotton fabric	2022	Scientific Reports	12	1		
126	Arshad M.S., Hina G., Anjum F.M., Suleria H.A.R.	Effect of milk-derived bioactive peptides on the lipid stability and functional properties of beef nuggets	2022	Scientific Reports	12	1		
127	Mustafa I., Anwar H., Irfan S., Muzaffar H., Ijaz M.U.	Attenuation of carbohydrate metabolism and lipid profile by methanolic extract of Euphorbia helioscopia and improvement of beta cell function in a type 2 diabetic rat model	2022	BMC Complementary Medicine and Therapies	22	1		
128	Alam M.Z., Kousar S., Rizwan Ullah M., Pervaiz A.	How creative destruction functions in corporate entrepreneurial process: an empirical investigation of Schumpeterian concept in engineering firm settings in Pakistan	2022	Journal of Innovation and Entrepreneurship	11	1		
129	Shah S.A.R., Naqvi S.A.A., Anwar S., Shah A.A., Nadeem A.M.	Socio-economic impact assessment of environmental degradation in Pakistan: fresh evidence from the Markov switching equilibrium correction model	2022	Environment, Development and Sustainability	24	12	13786	13816

130	Hussaan M., Tanvir K., Abbas S., Javed M.T., Iqbal N.	Zincâ€“Lysine (Znâ€“Lys) Decipher Cadmium Tolerance by Improved Antioxidants, Nutrient Acquisition, and Diminished Cd Retention in Two Contrasting Wheat Cultivars	2022	Journal of Plant Growth Regulation	41	8	3479	3497
131	Naqqash T., Fatima M., Saif-ur-Rehman, Bukhat S., Shahid M., Shabir G., Tahir M., Arshad M., Babar M.	Plant Growth-Promoting Rhizobacteria Significantly Improves Growth Attributes and Photosynthetic Machinery in Wheat	2022	Journal of Plant Growth Regulation	41	8	3372	3386
132	Usman M., Shabbir R., Ahmad I., Zubair A.	Host Countriesâ€™ Institutional Environment and Multinational Enterprises: Does Home-Host Developmental Status Matter?	2022	Journal of the Knowledge Economy	13	4	2640	2664
133	Zulfiqar M., Chen S., Yousaf M.U.	Birth mode of family firms, family entering time and R&D investment: evidence from China	2022	European Journal of Innovation Management	25	5	1242	1265
134	Buzdar M.A., Fatima T.	Frustration and motivation towards political participation in Muslim and non-Muslim young students in Pakistan	2022	Asian Journal of Comparative Politics	7	4	861	872
135	Ikram M., Haider A., Imran M., Haider J., Naz S., Ul-Hamid A., Nabgan W., Mustajab M., Shahzadi A., Shahzadi I., Raza M.A., Nazir G.	Facile synthesis of starch and tellurium doped SrO nanocomposite for catalytic and antibacterial potential: In silico molecular docking studies	2022	International Journal of Biological Macromolecules	221		496	507

136	Hameed A., Rehman T.U., Rehan Z.A., Noreen R., Iqbal S., Batool S., Qayyum M.A., Ahmed T., Farooq T.	Development of polymeric nanofibers blended with extract of neem ( <i>Azadirachta indica</i> ), for potential biomedical applications	2022	Frontiers in Materials	9			
137	Ahmad M.M., Qureshi T.M., Mushtaq M., Aqib A.I., Mushtaq U., Ibrahim S.A., Rehman A., Iqbal M.W., Imran T., Siddiqui S.A., Javed A., Shamim S., Saleem M.H.	Influence of baking and frying conditions on acrylamide formation in various prepared bakery, snack, and fried products	2022	Frontiers in Nutrition	9			
138	Ahmad A., Ikram A., Rehan M.F., Ahmad A.	Going green: Impact of green supply chain management practices on sustainability performance	2022	Frontiers in Psychology	13			
139	Jamal M.A., Shahazidy U., Al-Saeed F.A., Al Syaad K.M., Muneer M., Ahmed I., Ahmed A.E.	Investigations to Explore Molecular Interactions and Sweetness Response of Polyhydroxy Compounds with Amino Acids in Aqueous Systems	2022	ACS Omega	7	45	40950	40962
140	Nasim A., Rashid M.A.R., Hussain K., Al-Shahwan I.M., Al-Saleh M.A.	Interaction estimation of pathogenicity determinant protein $\beta^2C1$ encoded by Cotton leaf curl Multan Betasatellite with <i>Nicotiana benthamiana</i> Nuclear Transport Factor 2	2022	PeerJ	10			

141	Nordin S.M., Zolkepli I.A., Ahmad Rizal A.R., Tariq R., Mannan S., Ramayah T.	Paving the way to paddy food security: A multigroup analysis of agricultural education on Circular Economy Adoption	2022	Journal of Cleaner Production	375			
142	Tauqeer H.M., Basharat Z., Adnan Ramzani P.M., Farhad M., LewiÅ„ska K., Turan V., Karczewska A., Khan S.A., Faran G.-E., Iqbal M.	Aspergillus niger-mediated release of phosphates from fish bone char reduces Pb phytoavailability in Pb-acid batteries polluted soil, and accumulation in fenugreek	2022	Environmental Pollution	313			
143	Adeel S., Ahmad S., Habib N., Fazal-ur-Rehman, Mia R., Ahmed B.	Coloring efficacy of <i>Nyctanthes Arbortristis</i> based yellow natural dye for surface-modified wool	2022	Industrial Crops and Products	188			
144	Ahsan H., Shahid M., Imran M., Mahmood F., Siddique M.H., Ali H.M., Niazi M.B.K., Hussain S., Shahbaz M., Ayyub M., Shahzad T.	Photocatalysis and adsorption kinetics of azo dyes by nanoparticles of nickel oxide and copper oxide and their nanocomposite in an aqueous medium	2022	PeerJ	10			
145	King M.J., Brambley E.J., Liupekevicius R., Radia M., Lafourcade P., Shah T.H.	The critical layer in quadratic flow boundary layers over acoustic linings	2022	Journal of Fluid Mechanics	950			

146	Saeed M., Al-Saeed F.A., Altaf M., Alahmari S.D., Bokhari T.H., Bajaber M.A., Khan I., Ahmed A.E.	Synthesis of a visible-light-driven Ag <sub>2</sub> O-Co <sub>3</sub> O <sub>4</sub> Z-scheme photocatalyst for enhanced photodegradation of a reactive yellow dye	2022	New Journal of Chemistry	46	48	23297	23304
147	Makhdoom E.U.H., Anwar H., Baig S.M., Hussain G.	Whole exome sequencing identifies a novel mutation in aspm and ultra-rare mutation in cdk5rap2 causing primary microcephaly in consanguineous pakistani families	2022	Pakistan Journal of Medical Sciences	38	1	84	89
148	Ikram M., Jamal F., Haider A., Dilpazir S., Shujah T., Naz M., Imran M., Ul-Hamid A., Shahzadi I., Ullah H., Nabgan W., Ali S.	Efficient Photocatalytic Dye Degradation and Bacterial Inactivation by Graphitic Carbon Nitride and Starch-Doped Magnesium Hydroxide Nanostructures	2022	ACS Omega	7	44	39998	40008
149	Naqvi S.A.R., Jabbar T., Alharbi M.A., Noureen A., Alharbi N.K., Sherazi T.A., Shahzadi A., Ahmed A.E., Afzal M.S., Imran M.B.	Radiosynthesis, quality control, biodistribution, and infection-imaging study of a new 99mTc-labeled ertapenem radiopharmaceutical	2022	Frontiers in Chemistry	10			
150	Tabassum J., Raza Q., Riaz A., Ahmad S., Rashid M.A.R., Javed M.A., Ali Z., Kang F., Khan I.A., Atif	Exploration of the genomic atlas of Dof transcription factor family across genus Oryza provides novel insights on rice breeding in changing climate	2022	Frontiers in Plant Science	13			

	R.M., Luo J.							
151	Xiao L., Ahmad M., Waseem L.A., Ahmad M.M., Khan A.A.	Financial development and real exchange rate misalignments effects on environmental pollution	2022	Frontiers in Environmental Science	10			
152	Ashraf N., Asari A., Yousaf N., Ahmad M., Ahmed M., Faisal A., Saleem M., Muddassar M.	Combined 3D-QSAR, molecular docking and dynamics simulations studies to model and design TTK inhibitors	2022	Frontiers in Chemistry	10			
153	Alvi M., Rehman K., Akash M.S.H., Yaqoob A., Shoaib S.M.	Determination of Metabolomics Profiling in BPA-Induced Impaired Metabolism	2022	Pharmaceutics	14	11		
154	Rasheed M.U., Naqvi S.A.R., Rasool N., Shah S.A.A., Zakaria Z.A.	Anti-Diabetic and Cytotoxic Evaluation of Phlomis stewartii Plant Phytochemicals on Cigarette Smoke Inhalation and Alloxan-Induced Diabetes in Wistar Rats	2022	Metabolites	12	11		
155	Kanwal A., Bilal M., Rasool N., Zubair M., Shah S.A.A., Zakaria Z.A.	Total Synthesis of Terpenes and Their Biological Significance: A Critical Review	2022	Pharmaceutics	15	11		

156	Haider M.N., Liu C.-G., Tabish T.A., Balakrishnan D., Show P.-L., Qattan S.Y.A., Gull M., Mehmood M.A.	Resource Recovery of the Wastewater-Derived Nutrients into Algal Biomass Followed by Its Cascading Processing to Multiple Products in a Circular Bioeconomy Paradigm	2022	Fermentation	8	11		
157	Iftikhar N., Hussain A.I., Kamal G.M., Manzoor S., Fatima T., Alswailmi F.K., Ahmad A., Alsuwayt B., Abdullah Alnasser S.M.	Antioxidant, Anti-Obesity, and Hypolipidemic Effects of Polyphenol Rich Star Anise ( <i>Illicium verum</i> ) Tea in High-Fat-Sugar Diet-Induced Obesity Rat Model	2022	Antioxidants	11	11		
158	Gul-E-Mizgan, Kousar S., Khan I.A., Perwasha P., Gul H., Aslam I., Abbas A., Qurat-Ul-Ain	Evaluation of Anti-clotting and thrombolytic potential of the aqueousmethanolic extract of <i>Jasminum sambac</i>	2022	Pakistan Journal of Pharmaceutical Sciences	35	6	1747	1754
159	Ishtiaq M., Asghar S., Khan I.U., Iqbal M.S., Khalid S.H.	Development of the Amorphous Solid Dispersion of Curcumin: A Rational Selection of Polymers for Enhanced Solubility and Dissolution	2022	Crystals	12	11		
160	Tufail T., Ain H.B.U., Saeed F., Nasir M., Basharat S., Mahwish, Rusu A.V., Hussain M., Rocha J.M., Trif M., Aadil R.M.	A Retrospective on the Innovative Sustainable Valorization of Cereal Bran in the Context of Circular Bioeconomy Innovations	2022	Sustainability (Switzerland)	14	21		

161	Munir F., Aamir M.N., Madni A., Syed S.K., Shirazi J.H., Khalid N., Sheikh F.A.	Formulation and evaluation of antiviral drug sofosbuvir fast dissolving tablets using natural super disintegrants	2022	Pakistan Journal of Pharmaceutical Sciences	35	6	1573	1580
162	Vivas-Cortez M., Awan M.U., Ullah M.U., Talib S., Noor M.A., Noor K.I.	Tempered Fractional Trapezium Inequalities	2022	Axioms	11	11		
163	Ajaz N., Abbas A., Afshan R., Irfan M., Khalid S.H., Asghar S., Munir M.U., Rizg W.Y., Majrashi K.A., Alshehri S., Alissa M., Majrashi M., Bukhary D.M., Hussain G., Rehman F., Khan I.U.	In Vitro and In Vivo Evaluation of Hydroxypropyl- $\beta$ -cyclodextrin-grafted-poly(acrylic acid)/poly(vinyl pyrrolidone) Semi-Interpenetrating Matrices of Dexamethasone Sodium Phosphate	2022	Pharmaceuticals	15	11		
164	Sadia M., Mahmood A., Ibrahim M., Irshad M.K., Quddusi A.H.A., Bokhari A., Mubashir M., Chuah L.F., Show P.L.	Microplastics pollution from wastewater treatment plants: A critical review on challenges, detection, sustainable removal techniques and circular economy	2022	Environmental Technology and Innovation	28			
165	Akram N.A., Saleem M.H., Shafiq S., Naz H., Farid-ul-Haq M., Ali B., Shafiq F., Iqbal M., Jaremko M., Qureshi K.A.	Phytoextracts as Crop Biostimulants and Natural Protective Agentsâ€”A Critical Review	2022	Sustainability (Switzerland)	14	21		

166	Jalil M., Hussain M., Khadimallah M.A., Iqbal W., Loukil H., Mouldi A., Mahmoud S.R., Tounsi A.	Combined influence of slip parameter and Reynolds number on Casson nanofluid flowing in stretching cylinder	2022	Computers and Concrete	30	5	369	375
167	Tamoor M., Bhatti A.R., Butt A.D., Miran S., Kiren T., Farhan M., Raza F., ZakaUllah P.	Optimal Sizing of a Centralized Hybrid Photovoltaic System for Efficient Operation of Street Lights	2022	Journal of Engineering Research (Kuwait)	10			
168	Zahid I., Farooq M., Farhan M., Usman M., Qamar A., Imran M., Alqahtani M.A., Anwar S., Sultan M., Javaid M.Y.	Thermal Performance Analysis of Various Heat Sinks Based on Alumina NePCM for Passive Cooling of Electronic Components: An Experimental Study	2022	Energies	15	22		
169	Manzoor A., Adesola R.O.	Disaster in public health due to flood in Pakistan in 2022	2022	Health Science Reports	5	6		
170	Shahid M., Usman M., Shahzad T., Ali I., Hassan M.U., Mahmood F., Qari S.H.	Enhancement of Wheat Growth by UV-Mutagenesis of Potential Chromium Tolerant Bacillus sp. Strain SR-2-1/1	2022	Sustainability (Switzerland)	14	22		
171	Shakoori M.A., He M., Shahzad A.	Diffusion coefficients of dusty plasmas in electric field	2022	European Physical Journal D	76	11		
172	Naqvi S.A.A., Hussain B., Shah A.A., Tariq M.A.U.R., Usman M.	Influence of Economic Growth, Energy Production, and Subcomponents on the Environment: A Regional Level Analytical Modeling	2022	Sustainability (Switzerland)	14	22		

173	Iqbal S., Shaikh N.N., Khan K.M., Kiran S., Naz S., Ul-Haq Z., Perveen S., Choudhary M.I.	Synthesis of 2-Aminopyrimidine Derivatives and Their Evaluation as $\beta$ -Glucuronidase Inhibitors: In Vitro and In Silico Studies	2022	Molecules	27	22		
174	Mahmood S., Khan S.G., Rasul A., Christensen J.B., Abourehab M.A.S.	Ultrasound Assisted Synthesis and In Silico Modelling of 1,2,4-Triazole Coupled Acetamide Derivatives of 2-(4-Isobutyl phenyl)propanoic acid as Potential Anticancer Agents	2022	Molecules	27	22		
175	Sabra A., Amer M.A., Hussain K., Zakri A., Al-Shahwan I.M., Al-Saleh M.A.	Occurrence and Distribution of Tomato Brown Rugose Fruit Virus Infecting Tomato Crop in Saudi Arabia	2022	Plants	11	22		
176	Hui Z.-H., Kanwal S., Aslam A., Saeed S., Idrees N.	A mathematical investigation for appraisal of crystal structure lattices through eccentricity-based topological invariants, QSPR analysis, and MCDA	2022	European Physical Journal Plus	137	11		
177	Almuhayawi M.S., Al Jaouni S.K., Selim S., Alkhalifah D.H.M., Marc R.A., Aslam S., Poczai P.	Integrated Pangenome Analysis and Pharmacophore Modeling Revealed Potential Novel Inhibitors against Enterobacter xiangfangensis	2022	International Journal of Environmental Research and Public Health	19	22		
178	Zia M.A., Khosa M.K., Noor A., Qayyum S., Shakir M.S.	PMMA/ABS/CoCl <sub>2</sub> Composites for Pharmaceutical Applications: Thermal, Antimicrobial, Antibiofilm, and Antioxidant Studies	2022	Molecules	27	22		

179	Nadeem S., Bukhari M., Javed M., Iqbal S., Ahmad M.N., Alrbyawi H., Al-Anazy M.M., Elkaeed E.B., Hegazy H.H., Qayyum M.A., Pashameah R.A., Alzahrani E., Farouk A.-E.	Cation Incorporation and Synergistic Effects on the Characteristics of Sulfur-Doped Manganese Ferrites S@Mn(Fe2O4) Nanoparticles for Boosted Sunlight-Driven Photocatalysis	2022	Molecules	27	22		
180	Saif M.J., Fazal-ur-Rehman, Abrar S., Hameed A., Idrees N., Asif M.	Theoretical and Experimental Insights of Benzimidazole Catalyzed by the Epoxy-“Acrylic Acid Reaction	2022	Molecules	27	22		
181	Rehman H.U., Munir M., Ashraf K., Fatima K., Shahab S., Ali B., Al-Saeed F.A., Abbas A.M., Zaman Q.U.	Heavy Metals, Pesticide, Plasticizers Contamination and Risk Analysis of Drinking Water Quality in the Newly Developed Housing Societies of Gujranwala, Pakistan	2022	Water (Switzerland)	14	22		
182	Makhdum M.S.A., Usman M., Kousar R., Cifuentes-Faura J., Radulescu M., Balsalobre-Lorente D.	How Do Institutional Quality, Natural Resources, Renewable Energy, and Financial Development Reduce Ecological Footprint without Hindering Economic Growth Trajectory? Evidence from China	2022	Sustainability (Switzerland)	14	21		
183	Usman M., Raza S., Sultana H., Raza Z.A., Siddiq M., Haq A.U., Bukhtawar F., Younis S.,	Interaction of Direct Blue 86 with cationic surfactant micelles: Spectroscopic, conductometric and thermodynamic aspects	2022	Tenside, Surfactants, Detergents	59	6	501	510

	Rafiq S.						
184	Ali A., Khan H.S., Saleem S., Hussan M.	EMHD Nanofluid Flow with Radiation and Variable Heat Flux Effects along a Slender Stretching Sheet	2022	Nanomaterials	12	21	
185	Akram A., Irfan M., Abualsunun W.A., Bukhary D.M., Alissa M.	How to Improve Solubility and Dissolution of Irbesartan by Fabricating Ternary Solid Dispersions: Optimization and In-Vitro Characterization	2022	Pharmaceutics	14	11	
186	Mughal A., Sultan K., Ashraf K., Hassan A., Zaman Q.U., Haider F.U., Shahzad B.	Risk Analysis of Heavy Metals and Groundwater Quality Indices in Residential Areas: A Case Study in the Rajanpur District, Pakistan	2022	Water (Switzerland)	14	21	
187	Thind S., Chaudhary M.S., Ditta A., Hussain I., Parveen A., Ullah N., Mahmood Q., Al-ashkar I., El-Sabagh A.	Impact of Mycorrhizal Fungi from Different Rhizospheric Soils on Fungal Colonization, Growth, and Chlorophyll Contents of <i>Cenchrus ciliaris</i>	2022	Agronomy	12	11	
188	Naz A., Irfan A., Al-Hussain S.A., Nawaz I., Faisal S., Sattar R., Zaki M.E.A.	Hierarchical Polyaniline Core-Shell Nanocomposites Coated on Modified Graphite for Improved Electrical Conductivity Performance	2022	Nanomaterials	12	21	

189	Rubab L., Anum A., Al-Hussain S.A., Irfan A., Ahmad S., Ullah S., Al-Mutairi A.A., Zaki M.E.A.	Green Chemistry in Organic Synthesis: Recent Update on Green Catalytic Approaches in Synthesis of 1,2,4-Thiadiazoles	2022	Catalysts	12	11		
190	Hussain M., Saeed F., Niaz B., Imran A., Tufail T.	Biochemical and Structural Characterization of Ferulated Arabinoxylans Extracted from Nixtamalized and Non-Nixtamalized Maize Bran	2022	Foods	11	21		
191	Rana R., Mehmood M.H., Shaukat B., Shahid S., Malik A., Murtaza B.	Evaluation of the Cardiovascular Effects of <i>Coriandrum sativum</i> and <i>Citrus limon</i> to Treat Arsenic-Induced Endothelial Damage and Hypertension in Rats	2022	Life	12	11		
192	Djalovic I., Riaz M., Akhtar K., Bekavac G., Paunovic A., Pejanovic V., Zaheer S., Prasad P.V.V.	Yield and Grain Quality of Divergent Maize Cultivars under Inorganic N Fertilizer Regimes and Zn Application Depend on Climatic Conditions in Calcareous Soil	2022	Agronomy	12	11		
193	Rahim M.A., Imran M., Khan M.K., Haseeb Ahmad M., Nadeem M., Khalid W., Lorenzo J.M., Afifi M.M., AL-Farga A., Aljobair M.O.	Omega-3 Fatty Acid Retention and Oxidative Stability of Spray-Dried Chiaâ€“Fish-Oil-Prepared Microcapsules	2022	Processes	10	11		

194	Naqvi S.M.R.S., Farooq U., Waqas H., Muhammad T., Abid M.	Solar radiation effects on unsteady bio convectional flow of viscoelastic nanofluid confined by a wedge	2022	Advances in Mechanical Engineering	14	11		
195	Asghar A., Afzaal M., Nosheen F., Saeed F., Nayik G.A., AL-Farga A., Alansari W.S., Eskandrani A.A., Shamlan G.	Isolation and Molecular Characterization of Processed Soybean Waste for the Development of Synbiotic Yogurt	2022	Fermentation	8	11		
196	Shah M.A., Hamid A., Faheem H.I., Rasul A., Baobab T.A.S., Haris M., Yousaf R., Saleem U., Iqbal S., Alves M.S., Khan Z., Hussain G., Alsharfi I., Khan H., Jeandet P.	Uncovering the Anticancer Potential of Polydatin: A Mechanistic Insight	2022	Molecules	27	21		
197	Aziz A., Noreen S., Khalid W., Mubarik F., Niazi M.K., Koraqi H., Ali A., Lima C.M.G., Alansari W.S., Eskandrani A.A., Shamlan G., AL-Farga A.	Extraction of Bioactive Compounds from Different Vegetable Sprouts and Their Potential Role in the Formulation of Functional Foods against Various Disorders: A Literature-Based Review	2022	Molecules	27	21		

	Mallhi T.H., Ahmad N., Salman M., Tanveer N., Shah S., Butt M.H., Alatawi A.D., Alotaibi N.H., Rahman H.U., Alzarea A.I., Alanazi A.S., Alzahrani M.S., Alsbehri S., Aljabri A., Khan Y.H.	Estimation of Psychological Impairment and Coping Strategies during COVID-19 Pandemic among University Students in Saudi Arabia: A Large Regional Analysis	2022	International Journal of Environmental Research and Public Health	19	21		
198	Javed M.R., Salman M., Tariq A., Tawab A., Zahoor M.K., Naheed S., Shahid M., Ijaz A., Ali H.	The Antibacterial and Larvicidal Potential of Bis-(2-Ethylhexyl) Phthalate from <i>Lactiplantibacillus plantarum</i>	2022	Molecules	27	21		
199	Björklund G., Gasmi A., Lenchyk L., Shanaida M., Zafar S., Mujawdiya P.K., Lysiuk R., Antonyak H., Noor S., Akram M., Smetanina K., Piscopo S., Upyr T., Peana M.	The Role of Astaxanthin as a Nutraceutical in Health and Age-Related Conditions	2022	Molecules	27	21		
200	Zhou B., Qi F., Riaz M.F., Ali T.	An Analysis of the Factors behind Rural Residents' Satisfaction with Residential Waste Management in Jiangxi, China	2022	International Journal of Environmental Research and Public Health	19	21		

202	Afnan, Saleem A., Akhtar M.F., Sharif A., Akhtar B., Siddique R., Ashraf G.M., Alghamdi B.S., Alharthy S.A.	Anticancer, Cardio-Protective and Anti-Inflammatory Potential of Natural-Sources-Derived Phenolic Acids	2022	Molecules	27	21		
203	Mateen A., Ansari M.Z., Abbas Q., Muneeb A., Hussain A., Eldin E.T., Alzahrani F.M., Alsaiari N.S., Ali S., Javed M.S.	In Situ Nitrogen Functionalization of 2D-Ti3C2Tx-MXenes for High-Performance Zn-Ion Supercapacitor	2022	Molecules	27	21		
204	Sultana R., Abid O.-U.-R., Sultana N., Fakhar-e-Alam M., Siddique M.H., Atif M., Nawaz M., Wadood A., Rehman A.U., Farooq W.A., Shafeeq S., Afzal M.	Potential enzyme inhibitor triazoles from aliphatic esters: Synthesis, enzyme inhibition and docking studies	2022	Journal of Saudi Chemical Society	26	6		
205	Ali A., Ashfaq M., Din Z.U., Ibrahim M., Khalid M., Assiri M.A., Riaz A., Tahir M.N., Rodrigues-Filho E., Imran M., Kuznetsov A.	Synthesis, Structural, and Intriguing Electronic Properties of Symmetrical Bis-Aryl- $\pi$ -Unsaturated Ketone Derivatives	2022	ACS Omega	7	43	39294	39309

206	Nadeem Z., Iqbal J., Kausar S., Gasmi Benahmed A., Noor S., Khan F.S., Saleem I., Munir N., Riaz M., Akram M., Oladoye P.O., Salim S.A., Abed A.A., Elbossaty W.F., Gasmi A.	Comparative Analysis of the Efficacies of the GeneXpert and Solid Culture Media Techniques in the Diagnosis of Mycobacterium Tuberculosis	2022	Archives of Razi Institute	77	6	2053	2060
207	Bashir W., Sultana S., Sultana T., Al-Misned F., Riaz M.N.	Histopathology unveiling the structural damage in gonads of Catla catla due to freshwater contamination	2022	Journal of King Saud University - Science	34	8		
208	Mungmumpuntipantip R., Wiwanitkit V.	The first few cases of monkeypox infection in non-endemic countries: Correspondence	2022	Journal of Infection and Public Health	15	11	1192	
209	Mukhtar K., Nabi B.G., Arshad R.N., Roobab U., Yaseen B., Ranjha M.M.A.N., Aadil R.M., Ibrahim S.A.	Potential impact of ultrasound, pulsed electric field, high-pressure processing and microfluidization against thermal treatments preservation regarding sugarcane juice ( <i>Saccharum officinarum</i> )	2022	Ultrasonics Sonochemistry	90			
210	Ijaz M.U., Shahzadi S., Ashraf A., Mahboob S., Al-Ghanim K.A., Riaz M.N., Al-Misned F., Sultana S.	Protective effect of baicalin on methotrexate-induced mitochondrial damage in testicular tissues of rats	2022	Journal of King Saud University - Science	34	8		

211	Fatima A., Chand N., Naz S., Saeed M., Khan N.U., Khan R.U.	Coping heat stress by crushed fennel ( <i>Foeniculum vulgare</i> ) seeds in broilers: Growth, redox balance and humoral immune response	2022	Livestock Science	265			
212	Shahbaz M., Zahid R.	Probing the factors influencing cloud computing adoption in healthcare organizations: A three-way interaction model	2022	Technology in Society	71			
213	Mungmumpuntipantip R., Wiwanitkit V.	Motivational interviewing approach and COVID-19 vaccine hesitancy: Correspondence	2022	Journal of Pediatric Nursing	67		168	
214	Fatima S., Mansha A., Asim S.	Computational Studies Followed by Effect of Solvent Polarity and Salts on HOMOâ€“LUMO Gap of 7-Hydroxy Coumarine Notably Reflected by Absorption and Emission Spectra	2022	Journal of Fluorescence	32	6	2351	2362
215	Xu T., Abdullah I., Akram N.A., Wang Y., Zhang L., Feng X., Wang J., Wang L.	Defoliation facilitates <i>Leymus chinensis</i> clones spatial expansion into saline-alkali soils under different population densities	2022	Flora: Morphology, Distribution, Functional Ecology of Plants	296			
216	Nadeem M.S., Munawar T., Mukhtar F., Manzoor S., Mahmood K., Al-Buraihi M.S., Katubi K.M., Ashiq M.N., Boukhris I., Iqbal F.	Facile synthesis of sunlight driven photocatalysts Zn <sub>0.9</sub> Ho <sub>0.05</sub> M <sub>0.05</sub> O (M = Pr, Sm, Er) for the removal of synthetic dyes from wastewater	2022	Surfaces and Interfaces	34			

217	Waqas H., Fida M., Liu D., Manzoor U., Alghamdi M., Muhammad T.	Heat transport of nanofluid flow through a porous channel with thermal radiation effects	2022	International Communications in Heat and Mass Transfer	138			
218	Hafeez A., Tipu M.I., Saleem M.H., Al-Ashkar I., Saneoka H., Sabagh A.E.	Foliar application of moringa leaf extract (MLE) enhanced antioxidant system, growth, and biomass related attributes in safflower plants	2022	South African Journal of Botany	150		1087	1095
219	Waqas H., Farooq U., Liu D., Alghamdi M., Noreen S., Muhammad T.	Numerical investigation of nanofluid flow with gold and silver nanoparticles injected inside a stenotic artery	2022	Materials and Design	223			
220	Bashir M., Majid F., Bibi I., Mushtaq J., Ali A., Farhat L.B., Katubi K.M., Alwadai N., Khan M.I., Iqbal M.	Ultrasonic assisted synthesis of ZnO nanoflakes and photocatalytic activity evaluation for the degradation of methyl orange	2022	Arabian Journal of Chemistry	15	11		
221	Mukhtar M.U., Iqbal N., Yang J., Nawaz Z., Peng T.L.	The first molecular identification and phylogenetic analysis of tick-borne pathogens in captive wild animals from Lohi Bher zoo, Pakistan	2022	Parasitology Research	121	11	3321	3326
222	Rehman H.U., Awan A.U., Allahyani S.A., Tag-ElDin E.M., Binyamin M.A., Yasin S.	Exact solution of paraxial wave dynamical model with Kerr Media by using ℥6 model expansion technique	2022	Results in Physics	42			

223	Saleem A., Najda A., Mubeen A., Akhtar M.F., Bukhari S.A., Zeb A.	HPLC-DAD analysis of Quercus leucotrichophora extract and appraisal of its antiasthmatic potential via modulation of aquaporins, inflammatory, and oxidative stress biomarkers in Albino mice	2022	Biomedicine and Pharmacotherapy	155			
224	Faisal Z., Saeed F., Afzaal M., Akram N., Shah Y.A., Islam F., Ateeq H.	Phytochemical profile and food applications of edible flowers: A comprehensive treatise	2022	Journal of Food Processing and Preservation	46	11		
225	Huang J., Qasim M., Khan K.A., Noman A., Islam W., Haider I., Jamal Z.A., Ghramh H.A., Wang L.	Role of powdery mildew in the behavior of parasitoid: A case study using whiteflies and Encarsia formosa on tomato plants	2022	Physiological and Molecular Plant Pathology	122			
226	Hussain M., Wang Z., Huang G., Mo Y., Guo Y., Kaousar R., Duan L., Tan W.	Evaluation of droplet deposition and efficiency of 28-homobrassinolide sprayed with unmanned aerial spraying system and electric air-pressure knapsack sprayer over wheat field	2022	Computers and Electronics in Agriculture	202			

227	Ali H., Ahmed S., Hsini A., Kizito S., Naciri Y., Djellabi R., Abid M., Raza W., Hassan N., Saif Ur Rehman M., Jamal Khan A., Khan M., Zia Ul Haq M., Aboagye D., Kashif Irshad M., Hassan M., Hayat A., Wu B., Qadeer A., Ajmal Z.	Efficiency of a novel nitrogen-doped Fe <sub>3</sub> O <sub>4</sub> impregnated biochar (N/Fe <sub>3</sub> O <sub>4</sub> @BC) for arsenic (III and V) removal from aqueous solution: Insight into mechanistic understanding and reusability potential	2022	Arabian Journal of Chemistry	15	11	
228	Lopez-Fernandez M., Tariq S., Naseem K., Ahmad A., Khan S., Younas U., Javed M.S., Fan W.S., Luque R., Ali S.	Graphene based composite membranes for environmental toxicology remediation, critical approach towards environmental management	2022	Chemosphere	307		
229	Liaqat S., Ahmed Z., Ali Q., Akbar A., Khalid N.	Development, characterization, and principal component analysis of fish bone-based fortified refined wheat flour tortilla and its organoleptic attributes	2022	Journal of Food Processing and Preservation	46	11	
230	Hafeez J., Bilal M., Rasool N., Hafeez U., Adnan Ali Shah S., Imran S., Amiruddin Zakaria Z.	Synthesis of ruthenium complexes and their catalytic applications: A review	2022	Arabian Journal of Chemistry	15	11	

231	Rehman A., Ali A., Ikram S., Amami M., Mahmood K.	Characterization of polycrystalline SnSe <sub>2</sub> thin films for thermoelectric applications grown by single-stage horizontal tube furnace (SSHTF)	2022	Optical Materials	133			
232	Anwar A., Imran M., Ramzan M., Khan F.A., Ismail N., Hussain A.I., Hussain S.M., Alsanie W.F., Iqbal H.M.N.	Chitosan-based Dy <sub>2</sub> O <sub>3</sub> /CuFe <sub>3</sub> O <sub>4</sub> bio-nanocomposite development, characterization, and drug release kinetics	2022	International Journal of Biological Macromolecules	220		788	801
233	Kamal S., Rehman S., Bibi I., Akhter N., Amir R., Alsanie W.F., Iqbal H.M.N.	Graphene oxide/chitosan composites as novel support to provide high yield and stable formulations of pectinase for industrial applications	2022	International Journal of Biological Macromolecules	220		683	691
234	Waqas H., Farooq U., Liu D., Abid M., Imran M., Muhammad T.	Heat transfer analysis of hybrid nanofluid flow with thermal radiation through a stretching sheet: A comparative study	2022	International Communications in Heat and Mass Transfer	138			
235	Saeed F., Afzaal M., Hanif H., Islam F., Hussain M., Shah Y.A., Ikram A.	Nutritional composition and functional properties of a fermented product (KOOZH): A review	2022	Journal of Food Processing and Preservation	46	11		
236	Javid M., Jiang X., Gao Y., Zhao L., Zhang X., Xu X., Farid A., Saleem M.F., Zuo X., Zhao Y., Pan L., Dong X.	Experimental and Theoretical Validation of Room Temperature Intrinsic Ferromagnetism in Cr <sub>3</sub> C <sub>2</sub> Due to Interstitial Carbon Atoms	2022	Physica Status Solidi - Rapid Research Letters	16	11		

237	Shah Y.A., Saeed F., Afzaal M., Waris N., Ahmad S., Shoukat N., Ateeq H.	Industrial applications of taro ( <i>Colocasia esculenta</i> ) as a novel food ingredient: A review	2022	Journal of Food Processing and Preservation	46	11		
238	Imran M., Aslam M., Alsagaby S.A., Saeed F., Ahmad I., Afzaal M., Arshad M.U., Abdelgawad M.A., El-Ghorab A.H., Khames A., Shariati M.A., Ahmad A., Hussain M., Imran A., Islam S.	Therapeutic application of carvacrol: A comprehensive review	2022	Food Science and Nutrition	10	11	3544	3561
239	Ahmad M.M., Chatha S.A.S., Iqbal Y., Hussain A.I., Khan I., Xie F.	Recent trends in extraction, purification, and antioxidant activity evaluation of plant leaf-extract polysaccharides	2022	Biofuels, Bioproducts and Biorefining	16	6	1820	1848
240	Ma J., Aqeel M., Khalid N., Nazir A., Alzuairb F.M., Al-Mushhin A.A.M., Hakami O., Iqbal M.F., Chen F., Alamri S., Hashem M., Noman A.	Effects of microplastics on growth and metabolism of rice ( <i>Oryza sativa L.</i> )	2022	Chemosphere	307			
241	Bajwa J.-U.-R., Hussain A.I., Nawaz H., Chatha S.A.S., Gulzar T.	Development of optimized regression model for Raman spectral analysis of pharmaceutical drugs cefixime and sitagliptin	2022	Journal of Raman Spectroscopy	53	11	1985	1995

242	Ahmad A., Tariq S., Zaman J.U., Martin Perales A.I., Mubashir M., Luque R.	Recent trends and challenges with the synthesis of membranes: Industrial opportunities towards environmental remediation	2022	Chemosphere	306			
243	Yameen M., Adeel S., Nasreen H., Fazal-ur-Rehman, Ghaffar A., Ahmad T., Inayat A.	Sustainable eco-friendly extraction of yellow natural dye from haar singhar ( <i>Nyctanthes arbor-tritis</i> ) for bio coloration of cotton fabric	2022	Environmental Science and Pollution Research	29	55	83810	83823
244	Qayyum M.A., Sultan M.H., Farooq Z., Muddassir K., Farooq T., Irfan A.	Quantitative estimation of essential/toxic elemental levels in the serum of esophagus cancer patients in relation to controls	2022	Environmental Science and Pollution Research	29	55	83191	83210
245	Kainat S., Gilani S.R., Asad F., Khalid M.Z., Khalid W., Ranjha M.M.A.N., Bangar S.P., Lorenzo J.M.	Determination and Comparison of Phytochemicals, Phenolics, and Flavonoids in <i>Solanum lycopersicum</i> Using FTIR Spectroscopy	2022	Food Analytical Methods	15	11	2931	2939
246	Zhang C., Cao R., Majeed M.T., Usman A.	Clean energy consumption and CO <sub>2</sub> emissions: does China reduce some pollution burdens through environmental regulation?	2022	Environmental Science and Pollution Research	29	52	79156	79167
247	Adrees M., Khan Z.S., Rehman M.Z., Rizwan M., Ali S.	Foliar spray of silicon nanoparticles improved the growth and minimized cadmium (Cd) in wheat under combined Cd and water-limited stress	2022	Environmental Science and Pollution Research	29	51	77321	77332

248	Majeed S., Junaid H.M., Waseem M.T., Khan Z.A., Khan A.M., Shahzad S.A.	Mechanochromic and AIE active fluorescent probes for solution and vapor phase detection of picric acid: Application of logic gate	2022	Journal of Photochemistry and Photobiology A: Chemistry	432				
249	Bataineh A.M.F., Saeed N., Obeidat A.F.S., Kamal S., Abu-Shawiesh M.O.A.	Robust Point M-Scale Estimators for Monitoring the Mean of EWMA Control Chart under the Normal Process	2022	Ain Shams Engineering Journal	13	6			
250	Khalid H., Khalid S., Sufyan M., Ashfaq U.A.	In-silico elucidation reveals potential phytochemicals against angiotensin-converting enzyme 2 (ACE-2) receptor to fight coronavirus disease 2019 (COVID-19)	2022	Zeitschrift fur Naturforschung - Section C Journal of Biosciences	77	11	473	482	
251	Wasim M.S., Amjad M., Habib S., Abbasi M.A., Bhatti A.R., Muyeen S.M.	A critical review and performance comparisons of swarm-based optimization algorithms in maximum power point tracking of photovoltaic systems under partial shading conditions	2022	Energy Reports	8		4871	4898	
252	Ahmed F., Gulzar T., Kiran S., Ahmad I., Fatima A., Yasir S., Alhajaim W.F., Khalil A., Ul-Islam M., Bakhsh E.M., Kamal T.	Nickel oxide and carboxymethyl cellulose composite beads as catalyst for the pollutant degradation	2022	Applied Nanoscience (Switzerland)	12	11	3585	3595	

253	Hussain T., Bashir F., Mujahid A., Intisar A., Ahmad M.N., Raza M.A., Din M.I., Jabeen U., Mushtaq A., Tareen H.	Highly Stable APTES Incorporated CNTs Based Ternary Polymer Composites with Improved Dielectric and Thermal Properties	2022	Silicon	14	16	10807	10816
254	Munawar A., Khalid A.M., Zahra N.B., Shad N.A., Shafeeq A., Razaq A., Javed Y., Sajid M.M.	Tetracycline biomimetic imprinted beads cast as a label-free sensing constituent in different transduction systems	2022	Applied Nanoscience (Switzerland)	12	11	3271	3277
255	Abbas A., Ahmad T., Hussain S., Noman M., Shahzad T., Iftikhar A., Cheema, Ijaz M., Tahir M., Gohari G., Li B., Mahmood F., Shahid M.	Immobilized biogenic zinc oxide nanoparticles as photocatalysts for degradation of methylene blue dye and treatment of textile effluents	2022	International Journal of Environmental Science and Technology	19	11	11333	11346
256	Qamar S.A., Riasat A., Jahangeer M., Fatima R., Bilal M., Iqbal H.M.N., Mu B.-Z.	Prospects of microbial polysaccharides-based hybrid constructs for biomimicking applications	2022	Journal of Basic Microbiology	62	11	1319	1336
257	Jahanger A., Usman M., Balsalobre-Lorente D.	Autocracy, democracy, globalization, and environmental pollution in developing world: Fresh evidence from STIRPAT model	2022	Journal of Public Affairs	22	4		

258	Usman M., Anwar S., Yaseen M.R., Makhdum M.S.A., Kousar R., Jahanger A.	Unveiling the dynamic relationship between agriculture value addition, energy utilization, tourism and environmental degradation in South Asia	2022	Journal of Public Affairs	22	4		
259	Iqbal M.J., Riaz M.S., Talha K., Shoukat R., Mahmood S., Ammar M., Li H.	Synthesis and transformation of calcium carbonate polymorphs with chiral purine nucleotides	2022	New Journal of Chemistry	46	47	22612	22620
260	Hussain G., Ahmed I., Rehman A.U., Subhani M.U., Morley N., Akhtar M., Arshad M.I., Anwar H.	Study of the role of dysprosium substitution in tuning structural, optical, electrical, dielectric, ferroelectric, and magnetic properties of bismuth ferrite multiferroic	2022	Journal of Alloys and Compounds	919			
261	Manan M., Saleem U., Ahmad B., Aslam N., Anwar A., Zafar A.	Anti-arthritis and toxicological evaluation of ethanolic extract of <i>Alternanthera bettzickiana</i> in rats	2022	Frontiers in Pharmacology	13			
262	Ahmad B., Shafique I., Kalyar M.N.	A moderated mediation model of the association between coworker social undermining and knowledge hiding	2022	VINE Journal of Information and Knowledge Management Systems	52	5	763	778
263	Mungmunpuntipantip R., Wiwanitkit V.	Monkeypox and Identify-Isolate-Inform (3I) Tool: Correspondence	2022	Prehospital and Disaster Medicine	37	5	715	

264	Shahid M., Kashif M., Khan K., Rehman A.U., Anjum F., Abbas M., Al-Mijalli S.H., Abbas S., Shahzad A.H., Riaz M., Iqbal M., Fatima M.	Anti-Inflammatory and Biofilm Inhibition Potential of Methanolic and Aqueous Extract of <i>Elettaria Cardamomum</i> and <i>Cichorium Intybus</i>	2022	Journal of Biological Regulators and Homeostatic Agents	36	5	1281	1289
265	Siddique A.B., Ahmad S., Shaheen M.A., Ali A., Tahir M.N., Vieira L.C., Muhammad S., Siddeeg S.M.	Synthesis, antimicrobial potential and computational studies of crystalline 4-bromo-2-(1,4,5-triphenyl-1H-imidazole-2-yl)phenol and its metal complexes	2022	CrystEngComm	24	47	8237	8247
266	Khawar R., Amin R., Zulfqar A., Hussain S., Hussain B., Muqaddas F.	Dark personality traits and entrepreneurial intentions among Pakistani university students: The role of executive functions and academic intent to entrepreneurship	2022	Frontiers in Psychology	13			
267	Sarfraz M.H., Shahid A., Asghar S., Aslam B., Ashfaq U.A., Raza H., Prieto M.A., Simal-Gandara J., Barba F.J., Rajoka M.S.R., Khurshid M., Nashwan A.J.	Personalized nutrition, microbiota, and metabolism: A triad for eudaimonia	2022	Frontiers in Molecular Biosciences	9			

268	Yaqoob A., Rehman K., Akash M.S.H., Alvi M., Shoaib S.M.	Biochemical profiling of metabolomics in heavy metal-intoxicated impaired metabolism and its amelioration using plant-based bioactive compound	2022	Frontiers in Molecular Biosciences	9			
269	Manzoor M.F., Arif Z., Kabir A., Mehmood I., Munir D., Razzaq A., Ali A., Goksen G., CoÅÝier V., Ahmad N., Ali M., Rusu A.	Oxidative stress and metabolic diseases: Relevance and therapeutic strategies	2022	Frontiers in Nutrition	9			
270	Ma J., Zia ur Rehman M., Saleem M.H., Adrees M., Rizwan M., Javed A., Rafique M., Qayyum M.F., Ali S.	Effect of phosphorus sources on growth and cadmium accumulation in wheat under different soil moisture levels	2022	Environmental Pollution	311			
271	Riaz A., Khan M.A., Junaid M., Gulbadan S., Manzoor A., Ejaz S.R., Ashraf G.A., Somaily H.H., Morsi M., Alshahrani T.	Effect of Nd <sup>3+</sup> ions on structural, spectral, magnetic, and dielectric properties of Co-Zn soft ferrites synthesized via sol-gel technique	2022	Materials Chemistry and Physics	290			
272	Fazal-ur-Rehman, Adeel S., Liaqat S., Hussaan M., Mia R., Ahmed B., Wafa H.	Environmental friendly bio-dyeing of silk using Alkanna tinctoria based Alkannin natural dye	2022	Industrial Crops and Products	186			

273	Gao D., Asghar S., Ye J., Zhang M., Hu R., Wang Y., Huang L., Yuan C., Chen Z., Xiao Y.	Dual-targeted enzyme-sensitive hyaluronic acid nanogels loading paclitaxel for the therapy of breast cancer	2022	Carbohydrate Polymers	294			
274	Liu Z., Asghar A., Hou C., Ali I., Naqvi S.R., Wang N., Zhu H., Mehmood M.A., Liu C.-G.	Co-pyrolysis of the Chinese liquor industry waste and bamboo waste, elucidation of the pyrolysis reaction chemistry, and TG-FTIR-MS based study of the evolved gases	2022	Fuel	326			
275	Azhar Khan M., Aslam S., Asif Iqbal M., Junaid M., Gulbadan S., Rabia Ejaz S., Manzoor A., Ashraf G.A., Noor ul Huda Khan Asghar H.M., Somaily H.H., Morsi M., Alshahrani T.	Structural spectral, dielectric, and magnetic properties of Mg substituted Ba <sub>3</sub> CoFe <sub>24</sub> O <sub>41</sub> Z-type hexaferrites	2022	Journal of Magnetism and Magnetic Materials	560			
276	Farid A., Khan A.S., Javid M., Usman M., Khan I.A., Ahmad A.U., Fan Z., Khan A.A., Pan L.	Construction of a binder-free non-enzymatic glucose sensor based on Cu@Ni coreâ€“shell nanoparticles anchored on 3D chiral carbon nanocoils-nickel foam hierarchical scaffold	2022	Journal of Colloid and Interface Science	624		320	337
277	Rashid S., Kubra K.T., Sultana S., Agarwal P., Osman M.S.	An approximate analytical view of physical and biological models in the setting of Caputo operator via Elzaki transform decomposition method	2022	Journal of Computational and Applied Mathematics	413			

278	Shafique I., Kalyar M.N., Shafique M., Kianto A., Beh L.-S.	Demystifying the link between knowledge management capability and innovation ambidexterity: organizational structure as a moderator	2022	Business Process Management Journal	28	45418	1343	1363
279	Riaz M., Zhao S., Kamran M., Ur Rehman N., Mora-Poblete F., Maldonado C., Hamzah Saleem M., Parveen A., Ahmed Al-Ghamdi A., Al-Hemaid F.M., Ali S., Elshikh M.S.	Effect of nano-silicon on the regulation of ascorbate-glutathione contents, antioxidant defense system and growth of copper stressed wheat ( <i>Triticum aestivum L.</i> ) seedlings	2022	Frontiers in Plant Science	13			
280	Zia K., Rao M.J., Sadaqat M., Azeem F., Fatima K., Tahir ul Qamar M., Alshammari A., Alharbi M.	Pangenome-wide analysis of cyclic nucleotide-gated channel (CNGC) gene family in citrus Spp. Revealed their intraspecies diversity and potential roles in abiotic stress tolerance	2022	Frontiers in Genetics	13			
281	Fatima N., Anwar F., Saleem U., Khan A., Ahmad B., Shahzadi I., Ahmad H., Ismail T.	Antidiabetic effects of <i>Brugmansia aurea</i> leaf extract by modulating the glucose levels, insulin resistance, and oxidative stress mechanism	2022	Frontiers in Nutrition	9			

	Habib-ur-Rahman M., Ahmad A., Raza A., Hasnain M.U., Alharby H.F., Alzahrani Y.M., Bamagoos A.A., Hakeem K.R., Ahmad S., Nasim W., Ali S., Mansour F., EL Sabagh A.	Impact of climate change on agricultural production; Issues, challenges, and opportunities in Asia	2022	Frontiers in Plant Science	13			
282	Tamoor M., Hussain M.I., Bhatti A.R., Miran S., Arif W., Kiren T., Lee G.H.	Investigation of dust pollutants and the impact of suspended particulate matter on the performance of photovoltaic systems	2022	Frontiers in Energy Research	10			
283	Ghandourah E., Hussain M., Thobiani F.A., Hefni M., Alghamdi S.	Direct strength measurement of Timoshenko-beam model: Vibration analysis of double walled carbon nanotubes	2022	Structural Engineering and Mechanics	84	1	77	83
284	Noor F., Ashfaq U.A., Asif M., Adeel M.M., Alshammari A., Alharbi M.	Comprehensive computational analysis reveals YXX <sup>1</sup> [I/L/M/F/V] motif and YXX <sup>1</sup> -like tetrapeptides across HFRS causing Hantaviruses and their association with viral pathogenesis and host immune regulation	2022	Frontiers in Immunology	13			
285	Iqbal S., Rafique H.M., Hussain G., Ahmed I., Fareed A.	Investigation of multiferroic properties of dysprosium substituted bismuth ferrite ( $\text{Bi}_{1-x}\text{Dy}_x\text{FeO}_3$ ) prepared by auto combustion technique	2022	Digest Journal of Nanomaterials and Biostructures	17	4	1283	1295

287	Cheema A.I., Ahmed T., Abbas A., Noman M., Zubair M., Shahid M.	Antimicrobial activity of the biologically synthesized zinc oxide nanoparticles against important rice pathogens	2022	Physiology and Molecular Biology of Plants	28	10	1955	1967
288	Hussain M., Asghar S., Khadimallah M.A., Ayed H., Alghamdi S., Bhutto J.K., Mahmoud S.R., Tounsi A.	Effect of dimensionless nonlocal parameter: Vibration of double-walled CNTs	2022	Computers and Concrete	30	4	269	276
289	Akbar A., Ashraf M.A., Rasheed R., Hussain I., Ali S., Parveen A.	Exogenous menadione sodium bisulphite alleviates detrimental effects of alkaline stress on wheat ( <i>Triticum aestivum L.</i> )	2022	Physiology and Molecular Biology of Plants	28	10	1889	1903
290	Khadimallah M.A., Harbaoui I., Casimir J.B., Taieb L.H., Hussain M., Tounsi A.	Continuous element method for aeroacoustics™ waves in confined ducts	2022	Advances in Nano Research	13	4	341	350
291	Abbas A., Anwar F., Ahmad N., Shahid M., Al-Mijalli S.H., Yaseen M., Farooq S., Iqbal M.	Characterization of Bioactives and Nutra-Pharmaceutical Potential of Supercritical Fluid and Hydro-Distilled Extracted Coriander Leaves Essential Oil	2022	Dose-Response	20	4		
292	Zafar F., Shahid M., Fatima H., Riaz M., Anjum F., Mushtaq Z., Zia S., Jahangir M.M., Aslam M.A.	Antibiofilm and Quorum Sensing Inhibition (QSI) Potential of Lagerstroemia speciosa Leaves Extract	2022	Dose-Response	20	4		

293	Ali A., Riaz S., Sameen A., Naumovski N., Iqbal M.W., Rehman A., Mehany T., Zeng X.-A., Manzoor M.F.	The Disposition of Bioactive Compounds from Fruit Waste, Their Extraction, and Analysis Using Novel Technologies: A Review	2022	Processes	10	10		
294	Bin-Mohsin B., Javed M.Z., Awan M.U., Mihai M.V., Budak H., Khan A.G., Noor M.A.	Jensen-Mercer Type Inequalities in the Setting of Fractional Calculus with Applications	2022	Symmetry	14	10		
295	Nonlaopon K., Awan M.U., Asif U., Javed M.Z., Slimane I., Kashuri A.	Fractional Jensen-Mercer Type Inequalities Involving Generalized Rainaâ€™s Function and Applications	2022	Symmetry	14	10		
296	Saleem T., Sarfaraz R.A., Ahmed I., Zulfiqar H., Iqbal Y., Saeed I., Ashraf M., Anwar U.	Synthesis and characterization of nanostructured ternary composites of graphene oxide/Fe <sub>3</sub> O <sub>4</sub> /NiO for waste water treatment	2022	Digest Journal of Nanomaterials and Biostructures	17	4	1203	1210
297	Sarfraz I., Rasul A., Jabeen F., Sultana T., Adem Åž.	Identification of Natural Compounds as Inhibitors of Pyruvate Kinase M2 for Cancer Treatment	2022	Molecules	27	20		

298	Syed M.A., Hanif S., Ain N.U., Syed H.K., Zahoor A.F., Khan I.U., Abualsunun W.A., Jali A.M., Qahl S.H., Sultan M.H., Madkhali O.A., Ahmed R.A., Abbas N., Hussain A., Qayyum M.A., Irfan M.	Assessment of Binary Agarose-Carbopol Buccal Gels for Mucoadhesive Drug Delivery: Ex Vivo and In Vivo Characterization	2022	Molecules	27	20		
299	Rafique M.A., Kiran S., Jamal A., Anjum M.N., Jalal F., Munir B., Hafiz I., Noureen F., Ajmal S., Ahmad W., Arshad M.Y.	Green synthesis of copper nanoparticles using Allium cepa (onion) peels for removal of Disperse Yellow 3 dye	2022	Desalination and Water Treatment	272		259	265
300	Munawar S., Zahoor A.F., Ali S., Javed S., Irfan M., Irfan A., Kotwica-Mojzych K., Mojzych M.	Mitsunobu Reaction: A Powerful Tool for the Synthesis of Natural Products: A Review	2022	Molecules	27	20		
301	Althurwi H.N., Alharthy K.M., Albaqami F.F., Altharawi A., Javed M.R., Muhseen Z.T., Tahir ul Qamar M.	mRNA-Based Vaccine Designing against Epstein-Barr Virus to Induce an Immune Response Using Immunoinformatic and Molecular Modelling Approaches	2022	International Journal of Environmental Research and Public Health	19	20		
302	Wang Y., Binyamin M.A., Amin I., Aslam A., Rao Y.	On the Classification of Telescopic Numerical Semigroups of Some Fixed Multiplicity	2022	Mathematics	10	20		

303	Kosar F., Alshallash K.S., Akram N.A., Sadiq M., Ashraf M., Alkhalfah D.H.M., Abdel Latef A.A.H., Elkelish A.	Trehalose-Induced Regulations in Nutrient Status and Secondary Metabolites of Drought-Stressed Sunflower ( <i>Helianthus annuus L.</i> ) Plants	2022	Plants	11	20		
304	Taj Y., Zainab S., Xin Q., Tawfiq F.M.O., Raza M., Malik S.N.	Certain Coefficient Problems for q-Starlike Functions Associated with q-Analogue of Sine Function	2022	Symmetry	14	10		
305	Liu D., Din M.U., Raza M., Malik S.N., Tang H.	Convexity, Starlikeness, and Prestarlikeness of Wright Functions	2022	Mathematics	10	20		
306	Atif M., Perveen S., Parveen A., Mahmood S., Saeed M., Zafar S.	Thiamine and Indole-3-Acetic Acid Induced Modulations in Physiological and Biochemical Characteristics of Maize ( <i>Zea mays L.</i> ) under Arsenic Stress	2022	Sustainability (Switzerland)	14	20		
307	Nasir M., Xia Y., Sharif A.B., Guo G., Zhu Q., Ur Rehman M., Abbasi Q.H.	A High Gain Embedded Helix and Dielectric Rod Antenna with Low Side Lobe Levels for IoT Applications	2022	Sensors	22	20		
308	Bin-Mohsin B., Rafique S., Cesarano C., Javed M.Z., Awan M.U., Kashuri A., Noor M.A.	Some General Fractional Integral Inequalities Involving LRâ€“Bi-Convex Fuzzy Interval-Valued Functions	2022	Fractal and Fractional	6	10		

309	Sadiq T., Khalid S.H., Khan I.U., Mahmood H., Asghar S.	Designing Deferoxamine-Loaded Flaxseed Gum and Carrageenan-Based Controlled Release Biocomposite Hydrogel Films for Wound Healing	2022	Gels	8	10		
310	Ahmad S., Boubakar H., Naseer S., Alim M.E., Sheikh Y.A., Ghaffar A., Al-Gburi A.J.A., Parchin N.O.	Design of a Tri-Band Wearable Antenna for Millimeter-Wave 5G Applications	2022	Sensors	22	20		
311	Mustafa G., Arshad M.U., Saeed F., Afzaal M., Niaz B., Hussain M., Raza M.A., Nayik G.A., Obaid S.A., Ansari M.J., Nap M.-E., SÃ£lÃ£gean T.	Comparative Study of Raw and Fermented Oat Bran: Nutritional Composition with Special Reference to Their Structural and Antioxidant Profile	2022	Fermentation	8	10		
312	Shahid S., Sultana T., Sultana S., Hussain B., Al-Ghanim K.A., Al-Bashir F., Riaz M.N., Mahboob S.	Detecting Aquatic Pollution Using Histological Investigations of the Gills, Liver, Kidney, and Muscles of <i>Oreochromis niloticus</i>	2022	Toxics	10	10		
313	Batool T., Javed S., Ashraf K., Sultan K., Zaman Q.U., Haider F.U.	Alleviation of Cadmium Stress by Silicon Supplementation in Peas by the Modulation of Morpho-Physio-Biochemical Variables and Health Risk Assessment	2022	Life	12	10		

314	Fareed M.M., Qasmi M., Aziz S., VÃ¶lker E., FÃ¶rster C.Y., Shityakov S.	The Role of Clusterin Transporter in the Pathogenesis of Alzheimerâ€™s Disease at the Bloodâ€“Brain Barrier Interface: A Systematic Review	2022	Biomolecules	12	10		
315	Javaid S., Ashraf K., Sultan K., Siddiqui M.H., Ali H.M., Chen Y., Zaman Q.U.	Risk Assessment of Potentially Toxic Metals and Metalloids in Soil, Water and Plant Continuum of Fragrant Rice	2022	Agronomy	12	10		
316	Mustafa S., Riaz M.A., Masoud M.S., Qasim M., Riaz A.	Impact of dietary inclusion of Chenopodium quinoa on growth performance and survival of Hubbard chicken	2022	PLoS ONE	17	45575		
317	Alam M., Rasool M.H., Khan I., Khurshid M., Aslam B.	Multilocus Sequence Typing of Carbapenem-Resistant Acinetobacter baumannii Isolates Harboring blaOXA-23and blaIMPin Cattle from Punjab, Pakistan	2022	Microbial Drug Resistance	28	10	997	1002
318	Bilal M., Sultan M., Majeed F., Farooq M., Sajjad U., Ibrahim S.M., Khan M.U., Azizi S., Javaid M.Y., Ahmad R.	Investigating Adsorption-Based Atmospheric Water Harvesting Potential for Pakistan	2022	Sustainability (Switzerland)	14	19		

319	Akhtar T., Batool F., Ahmad S., Al-Farraj E.S., Irfan A., Iqbal S., Ullah S., Zaki M.E.A.	Defatted Seed Residue of Cucumis Melo as a Novel, Renewable and Green Biosorbent for Removal of Selected Heavy Metals from Wastewater: Kinetic and Isothermal Study	2022	Molecules	27	19		
320	Riaz R.M.Y., Murtaza G., Farooqi Z.U.R., Ali S., Aziz H., Mahboob S., Al-Ghanim K.A., Owens G., Ahmad H.R., Riaz U.	Assessment of Arsenic Contamination in Groundwater and Associated Human Health Risk	2022	Sustainability (Switzerland)	14	19		
321	Saeed M.A., Murtaza G., Ali S., Aziz H., Albeshr M.F., Mahboob S., Manzoor I., Farooqi Z.U.R., Sabir M., Ahmad H.R., Abdul Qadir A., Sajjad ur Rehman M.	Assessment of Drinking Water Quality and Associated Socio-Economic Impacts in Arid Mountainous Regions	2022	Sustainability (Switzerland)	14	19		
322	Adeel S., Anjum F., Zuber M., Hussaan M., Amin N., Ozomay M.	Sustainable Extraction of Colourant from Harmal Seeds ( <i>Peganum harmala</i> ) for Dyeing of Bio-Mordanted Wool Fabric	2022	Sustainability (Switzerland)	14	19		
323	Hameed M.R., Attia H., Riaz U., Ashraf K., Alamer K.H., Althobaiti A.T., Algethami B., Sultan K., Khan A.A.A., Zaman Q.U.	Consortium between Groundwater Quality and Lint Yield in Cotton Belt Areas	2022	Water (Switzerland)	14	19		

324	Khan N.A., Rashid F., Jadoon M.S.K., Jalil S., Khan Z.A., Orfali R., Perveen S., Al-Taweel A., Iqbal J., Shahzad S.A.	Design, Synthesis, and Biological Evaluation of Novel Dihydropyridine and Pyridine Analogs as Potent Human Tissue Nonspecific Alkaline Phosphatase Inhibitors with Anticancer Activity: ROS and DNA Damage-Induced Apoptosis	2022	Molecules	27	19		
325	Iftikhar N., Saleem A., Akhtar M.F., Abbas G., Shah S., Bibi S., Ashraf G.M., Alghamdi B.S., Abujamel T.S.	In Vitro and In Vivo Anti-Arthritic Potential of <i>Caralluma tuberculata</i> N. E. Brown. and Its Chemical Characterization	2022	Molecules	27	19		
326	Alamri M.A., Tahir ul Qamar M., Alabbas A.B., Alqahtani S.M., Alossaimi M.A., Azam S., Hashmi M.H., Rajoka M.S.R.	Molecular and Structural Analysis of Specific Mutations from Saudi Isolates of SARS-CoV-2 RNA-Dependent RNA Polymerase and their Implications on Protein Structure and Drugâ€”Protein Binding	2022	Molecules	27	19		
327	Yusaf A., Usman M., Siddiq M., Bakhtiar M., Mansha A., Shaukat S., Rehman H.F.	Mixed Micellar Solubilization of Naphthol Green B Followed by Its Removal from Synthetic Effluent by Micellar-Enhanced Ultrafiltration under Optimized Conditions	2022	Molecules	27	19		

328	Khalid H.R., Aamir M., Tabassum S., Alghamdi Y.S., Alzamami A., Ashfaq U.A.	Integrated System Pharmacology Approaches to Elucidate Multi-Target Mechanism of <i>Solanum surattense</i> against Hepatocellular Carcinoma	2022	Molecules	27	19		
329	Ullah F., Ullah S., Khan M.F.A., Mustaqeem M., Paracha R.N., Rehman M.F.U., Kanwal F., Hassan S.S.U., Bungau S.	Fluorescent and Phosphorescent Nitrogen-Containing Heterocycles and Crown Ethers: Biological and Pharmaceutical Applications	2022	Molecules	27	19		
330	Rahim M.A., Yasmin A., Imran M., Nisa M.U., Khalid W., Esatbeyoglu T., Korma S.A.	Optimization of the Ultrasound Operating Conditions for Extraction and Quantification of Fructooligosaccharides from Garlic ( <i>Allium sativum L.</i> ) via High-Performance Liquid Chromatography with Refractive Index Detector	2022	Molecules	27	19		
331	Muzammil S., Wang Y., Siddique M.H., Zubair E., Hayat S., Zubair M., Roy A., Mumtaz R., Azeem M., Emran T.B., Shahid M.Q.	Polyphenolic Composition, Antioxidant, Antiproliferative and Antidiabetic Activities of <i>Coronopus didymus</i> Leaf Extracts	2022	Molecules	27	19		
332	Bashir S., Javed S., Al-Anazi K.M., Farah M.A., Ali S.	Bioremediation of Cadmium Toxicity in Wheat ( <i>Triticum aestivum L.</i> ) Plants Primed with L-Proline, <i>Bacillus subtilis</i> and <i>Aspergillus niger</i>	2022	International Journal of Environmental Research and Public Health	19	19		

333	Kanwal S., Azam A., Gulzar M., Santos-García G.	A Fixed Point Approach to Lattice Fuzzy Set via F-Contraction	2022	Mathematics	10	19		
334	Shahzad M.M., Akhter K., Hussain S.M., Hussain Z., Zahoor M.Y., Ahmad N., Khalid F., Rafique M.T.	EFFECTIVENESS OF PROBIOTICS SUPPLEMENTED LINSEED MEAL BASED DIETS ON OVERALL PERFORMANCE OF LABEO ROHITA	2022	Journal of Animal and Plant Sciences	32	5	1412	1422
335	Afzal G., Jamal A., Kiran S., Mustafa G., Mehmood T., Ahmad F., Saeed S., Ali A., Naz N., Zehra S.S., Khalil S., Dawood S.	COPPER OXIDE NANOPARTICLES SYNTHESIS USING AERVA JAVANICA AND THEIR ANTIMICROBIAL ACTIVITIES	2022	Journal of Animal and Plant Sciences	32	5	1403	1411
336	Iqbal J., Shah N.S., Khan Z.U.H., Rizwan M., Murtaza B., Jamil F., Shah A., Ullah A., Nazzal Y., Howari F.	Visible light driven doped CeO <sub>2</sub> for the treatment of pharmaceuticals in wastewater: A review	2022	Journal of Water Process Engineering	49			
337	Hasan M.N., Chand N., Naz S., Khan R.U., Ayañan T., Laudadio V., Tufarelli V.	Mitigating heat stress in broilers by dietary dried tamarind ( <i>Tamarindus indica</i> L.) pulp: Effect on growth and blood traits, oxidative status and immune response	2022	Livestock Science	264			

338	Kabouche A., Bachir Bouiadjra R., Bachiri A., Sekkal M., Benyoucef S., Saleh M.M.S., Tounsi A., Hussain M.	Study on the Mechanical Instability of Bidirectional Imperfect FG Sandwich Plates Subjected to In-Plane Loading	2022	Arabian Journal for Science and Engineering	47	10	13655	13672
339	Ziauddin, Hussain T., Nazir A., Mahmood U., Hameed M., Ramakrishna S., Abid S.	Nanoengineered Therapeutic Scaffolds for Burn Wound Management	2022	Current Pharmaceutical Biotechnology	23	12	1417	1435
340	Ali S., Muneer M., Khan Khosa M.K., Alfryyan N., Iqbal M.	Ionizing radiation based advanced oxidation process for reactive orange 122 dye degradation and kinetics studies	2022	Zeitschrift fur Physikalische Chemie	236	10	1321	1338
341	Ayyaz A., Fang R., Ma J., Hannan F., Huang Q., Athar H.-U.-R., Sun Y., Javed M., Ali S., Zhou W., Farooq M.A.	Calcium nanoparticles (Ca-NPs) improve drought stress tolerance in Brassica napus by modulating the photosystem II, nutrient acquisition and antioxidant performance	2022	NanolImpact	28			
342	Bukhtawar F., Usman M., Akram N., Haq A., Ahmad Z., Raza S., Younis S., Nazar M.F.	Enhanced solubilization of reactive dyes using mixed micellar media: insights from spectral and conductometric measurements	2022	Colloid and Polymer Science	300	10	1205	1215
343	Shabbir A., Rehman K., Akbar M., Akash M.S.H.	Neuroprotective Potential of Curcuminoids in Modulating Alzheimer's Disease via Multiple Signaling Pathways	2022	Current Medicinal Chemistry	29	34	5560	5581

344	Hussain M., Ranjha Q.A., Anwar M.S., Jahan S., Ali A.	Eyring-Powell model flow near a convectively heated porous wedge with chemical reaction effects	2022	Journal of the Taiwan Institute of Chemical Engineers	139			
345	Afsheen N., Rafique S., Rafeeq H., Irshad K., Hussain A., Huma Z., Kumar V., Bilal M., Aleya L., Iqbal H.M.N.	Neurotoxic effects of environmental contaminantsâ€”measurements, mechanistic insight, and environmental relevance	2022	Environmental Science and Pollution Research	29	47	70808	70821
346	Li Y.-C., Peng S., Kouser T.	Effect of wall slip on laminar flow past a circular cylinder	2022	Acta Mechanica	233	10	3957	3975
347	Afzal M., Ahmed H., Siddique M.H., Muzammil S., Azeem F., Hayat S., Shafeeq S., Albeshr M.F., Mahboob S.	Exploring the impact of paracetamol on the transcriptome of <i>Streptococcus pneumoniae</i> D39	2022	Journal of King Saud University - Science	34	7		
348	Ikram S., Ali A., Amin N., Tabassam I., Amami M., Javaid K., Yasir Ali M., Mahmood K., ul Ahmad A., Siyal S.H.	Effect of Al concentration on the structural and thermoelectric properties of ZnAlS alloy	2022	Inorganic Chemistry Communications	144			
349	Khalid W., Arshad M.S., Jabeen A., Muhammad Anjum F., Qaisrani T.B., Suleria H.A.R.	Fiber-enriched botanicals: A therapeutic tool against certain metabolic ailments	2022	Food Science and Nutrition	10	10	3203	3218

350	Waqas H., Fida M., Liu D., Manzoor U., Muhammad T.	Numerical simulation of entropy generation for nanofluid with the consequences of thermal radiation and Cattaneo-Christov heat flux model	2022	International Communications in Heat and Mass Transfer	137			
351	Zhu S., Irshad M.K., Ibrahim M., Chen Q., Shang J., Zhang Q.	The distinctive role of nano-hydroxyapatite modified biochar for alleviation of cadmium and arsenic toxicity in aqueous system	2022	Journal of Water Process Engineering	49			
352	Rasul M.N., Mehmood M., Hussain A., Rafiq M.A., Iqbal F., Khan M.A., Manzoor A.	Investigation of the Physical Properties of XCRh3 (X = Ti, V, Cr, Mn, Fe, Ni, Cu, Zn, Zr, Nb, Mo, Tc, Ru, Pd, Ag) Inverse Perovskites from First Principles	2022	Journal of Electronic Materials	51	10	5880	5896
353	Asghar A., Imran H.M., Bano N., Maalik S., Mushtaq S., Hussain A., Varjani S., Aleya L., Iqbal H.M.N., Bilal M.	SARS-COV-2/COVID-19: scenario, epidemiology, adaptive mutations, and environmental factors	2022	Environmental Science and Pollution Research	29	46	69117	69136
354	Akhtar P., Ullah S., Majeed M.T., Usman A.	Exchange Rate Volatility and Trade Flows of Pakistan with Major Trading Partners: Is There an Asymmetric Third-Country Effect?	2022	Journal of International Commerce, Economics and Policy	13	3		
355	Mehmood Z., Ikram M., Imran M., Shahzadi A., Haider A., Ul-Hamid A., Nabgan W., Haider J.,	Z. officinale-doped silver/calcium oxide nanocomposites: Catalytic activity and antimicrobial potential with molecular docking analysis	2022	Process Biochemistry	121		635	646

	Hayat S.							
356	Kanwal L., Ali S., Rasul A., Tahir H.M.	Smilax china root extract as a novel Glucose- 6-phosphate dehydrogenase inhibitor for the treatment of hepatocellular carcinoma	2022	Saudi Journal of Biological Sciences	29	10		
357	Tanveer A., Akhtar B., Sharif A., Saleem U., Rasul A., Ahmad A., Jilani K.	Pathogenic role of cytokines in COVID-19, its association with contributing co-morbidities and possible therapeutic regimens	2022	Inflammopharmacology	30	5	1503	1516
358	Abbas G., Rasul A., Fakhar-e-Alam M., Saadullah M., Muzammil S., Iqbal O., Atif M., Hanif M., Shah S., Ahmad S., Shafeeq S., Afzal M.	Nanoparticles of thiolated chitosan for controlled delivery of moxifloxacin: In-vitro and in-vivo evaluation	2022	Journal of King Saud University - Science	34	7		
359	Shah Y.A., Saeed F., Afzaal M., Ahmad A., Hussain M., Ateeq H., Khan M.H.	Biochemical and nutritional properties of wheat bulgur: A review	2022	Journal of Food Processing and Preservation	46	10		

360	Afzal A., Saeed F., Afzaal M., Maan A.A., Ikram A., Hussain M., Usman I., Shah Y.A., Anjum W.	The chemistry of flavor formation in meat and meat products in response to different thermal and non-thermal processing techniques: An overview	2022	Journal of Food Processing and Preservation	46	10		
361	Idrees M., Khan M.A., Gulbadan S., Mahmood K., Ashraf G.A., Akhtar M.N.	Structural and dielectric properties of Sr <sub>4</sub> Zn <sub>2</sub> Fe <sub>36</sub> O <sub>60</sub> U-type hexaferrites with optimized Gd contents and sintered by a two-step process	2022	Ceramics International	48	19	27739	27749
362	Zhang Y., Ahmad M.S., Shen B., Yuan P., Shah I.A., Zhu Q., Ibrahim M., Bokhari A., KlemeÅ¡ J.J., Elkamel A.	Co-pyrolysis of lychee and plastic waste as a source of bioenergy through kinetic study and thermodynamic analysis	2022	Energy	256			
363	Nazeer M., Ahamdi A.A.A., Alzaed A.N., Alwetaishi M., Nazir M.W., Khan M.I.	Impact of slip boundary conditions, magnetic force, and porous medium on blood flow of Jeffrey fluid	2022	ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik	102	10		
364	Manzoor M., Hussain A., Ahmad Q.-U.-A., Chaudhary A., Schenk P.M., Deepanraj B., Loke Show P.	Biodiesel quality assessment of microalgae cultivated mixotrophically on sugarcane bagasse	2022	Sustainable Energy Technologies and Assessments	53			

365	Chen F., Ahmad S., Arshad S., Ali S., Rizwan M., Hamzah Saleem M., Driha O.M., Balsalobre-Lorente D.	Towards achieving eco-efficiency in top 10 polluted countries: The role of green technology and natural resource rents	2022	Gondwana Research	110		114	127
366	Ikram M., Malik R., Raees R., Imran M., Wang F., Ali S., Khan M., Khan Q., Maqbool M.	Recent advancements and future insight of lead-free non-toxic perovskite solar cells for sustainable and clean energy production: A review	2022	Sustainable Energy Technologies and Assessments	53			
367	Naeem U., Arshad M.U., Saeed F., Imran A.	Extraction and characterization of polyphenols from fruits and vegetable waste through green extraction technologies with special reference to antioxidant profile	2022	Journal of Food Processing and Preservation	46	10		
368	Malik S., Ashraf M.U.F., Shahid A., Javed M.R., Khan A.Z., Usman M., Manivannan A., Mehmood M.A., Ashraf G.A.	Characterization of a newly isolated self-flocculating microalga <i>Bracteacoccus pseudominor</i> BERC09 and its evaluation as a candidate for a multiproduct algal biorefinery	2022	Chemosphere	304			
369	Moghalles K., Li H.-C., Al-Huda Z., Raza A., Malik A.	Weakly supervised building semantic segmentation via superpixel-CRF with initial deep seeds guiding	2022	IET Image Processing	16	12	3258	3267

370	Hassan A., Parveen A., Hussain S., Hussain I., Rasheed R.	Investigating the role of different maize ( <i>Zea mays L.</i> ) cultivars by studying morpho-physiological attributes in chromium-stressed environment	2022	Environmental Science and Pollution Research	29	48	72886	72897
371	Tanwir K., Shahid M., Abbas S., Ali Q., Akram M.S., Chaudhary H.J., Javed M.T.	Deciphering distinct root exudation, ionomics, and physio-biochemical attributes of <i>Serratia marcescens</i> CP-13 inoculated differentially Cd tolerant <i>Zea mays</i> cultivars	2022	Environmental Science and Pollution Research	29	47	71632	71649
372	Shahzadi E., Nawaz M., Adrees M., Asghar M.J., Iqbal N.	Elevated ozone phytotoxicity ameliorations in mung bean { <i>Vigna radiata</i> (L.) Wilczek} by foliar nebulization of silicic acid and ascorbic acid	2022	Environmental Science and Pollution Research	29	46	69680	69690
373	Saleem A., Bashir M., Abrar M.	Ethical behaviors by leaders act as a stimulant to the wellbeing of employees by restraining workplace embitterment	2022	Frontiers in Public Health	10			
374	Javed M., Saleem A., Xaveria A., Akhtar M.F.	Daphnetin: A bioactive natural coumarin with diverse therapeutic potentials	2022	Frontiers in Pharmacology	13			
375	Bari M.W., Saleem S., Bashir M., Ahmad B.	Impact of ambient air pollution on outdoor employees' performance: Mediating role of anxiety	2022	Frontiers in Psychology	13			

376	Ahmad R., Ilyas H.N., Li B., Sultan M., Amjad M., Aleem M., Abbas A., Imran M.A., Riaz F.	Current challenges and future prospect of biomass cooking and heating stoves in Asian Countries	2022	Frontiers in Energy Research	10			
377	Afzaal M., Saeed F., Shah Y.A., Hussain M., Rabail R., Socol C.T., Hassoun A., Pateiro M., Lorenzo J.M., Rusu A.V., Aadil R.M.	Human gut microbiota in health and disease: Unveiling the relationship	2022	Frontiers in Microbiology	13			
378	Rabhi M., Benrahou K.H., Yeghnem R., Guerroudj H.Z., Kaci A., Tounsi A., Hussain M.	Investigating dynamic response of porous advanced composite plates resting on Winkler/Pasternak/Kerr foundations using a new quasi-3D HSDT	2022	Structural Engineering and Mechanics	83	6	771	788
379	Zhou J., Cai Y., Liu Y., An H., Deng K., Ashraf M.A., Zou L., Wang J.	Breaking down the cell wall: Still an attractive antibacterial strategy	2022	Frontiers in Microbiology	13			
380	Hassan S., Zeng X.-A., Khan M.K., Farooq M.A., Ali A., Kumari A., Mahwish, Rahaman A., Tufail T., Liaqat A.	Recent developments in physical invigoration techniques to develop sprouts of edible seeds as functional foods	2022	Frontiers in Sustainable Food Systems	6			
381	Rehman M.H.U., Saleem U., Ahmad B., Rashid M.	Phytochemical and toxicological evaluation of <i>Zephyranthes citrina</i>	2022	Frontiers in Pharmacology	13			

382	Ma J., Ali S., Saleem M.H., Mumtaz S., Yasin G., Ali B., Al-Ghamdi A.A., Elshikh M.S., Vodnar D.C., Marc R.A., Rehman A., Khan M.N., Chen F., Ali S.	Short-term responses of Spinach ( <i>Spinacia oleracea L.</i> ) to the individual and combinatorial effects of Nitrogen, Phosphorus and Potassium and silicon in the soil contaminated by boron	2022	Frontiers in Plant Science	13			
383	Afreen M., Haq F., Mukhtar Z.	Flood susceptibility analysis of the Panjkora Valley Northern Pakistan, using frequencyratio approach	2022	International Journal of Disaster Resilience in the Built Environment	13	5	601	614
384	Kashif M., Anjum N., Shahzad A., Rasheed A., Imran M., Manzoor A.	Tuning the Electronic and Optical Properties of the ZrS <sub>2</sub> /PtS <sub>2</sub> van der Waals Heterostructure by an External Electric Field and Vertical Strain	2022	ACS Omega	7	37	33453	33460
385	Shaukat B., Mehmood M.H., Murtaza B., Javaid F., Khan M.T., Farrukh M., Rana R., Shahzad M.	<i>Ajuga bracteosa</i> Exerts Antihypertensive Activity in I -NAME-Induced Hypertension Possibly through Modulation of Oxidative Stress, Proinflammatory Cytokines, and the Nitric Oxide/Cyclic Guanosine Monophosphate Pathway	2022	ACS Omega	7	37	33307	33319
386	Abdullah B., Niazi M.B.K., Jahan Z., Khan O., Shahid A., Shah G.A., Azeem B., Iqbal Z., Mahmood A.	Role of zinc-coated urea fertilizers in improving nitrogen use efficiency, soil nutritional status, and nutrient use efficiency of test crops	2022	Frontiers in Environmental Science	10			

387	Anwar S., Faisal Nadeem M., Pervaiz I., Khurshid U., Akmal N., Aamir K., Haseeb ur Rehman M., Almansour K., Alshammari F., Shaikh M.F., Locatelli M., Ahemad N., Saleem H.	A comprehensive phytochemical, biological, and toxicological studies of roots and aerial parts of <i>Crotalaria burhia</i> Buch.-Ham: An important medicinal plant	2022	Frontiers in Plant Science	13			
388	Ashfaq M., Ali A., Nawaz Tahir M., Khalid M., Assiri M.A., Imran M., Shahzad Munawar K., Habiba U.	Synthetic approach to achieve halo imine units: Solid-state assembly, DFT based electronic and non linear optical behavior	2022	Chemical Physics Letters	803			
389	Ma J., Saleem M.H., Alsafran M., Jabri H.A., Mehwish, Rizwan M., Nawaz M., Ali S., Usman K.	Response of cauliflower ( <i>Brassica oleracea</i> L.) to nitric oxide application under cadmium stress	2022	Ecotoxicology and Environmental Safety	243			
390	Ashraf M.A., Rasheed R., Hussain I., Hafeez A., Adrees M., Rehman M.Z.U., Rizwan M., Ali S.	Effect of different seed priming agents on chromium accumulation, oxidative defense, glyoxalase system and mineral nutrition in canola ( <i>Brassica napus</i> L.) cultivars	2022	Environmental Pollution	309			

391	Nazir M.M., Noman M., Ahmed T., Ali S., Ulhassan Z., Zeng F., Zhang G.	Exogenous calcium oxide nanoparticles alleviate cadmium toxicity by reducing Cd uptake and enhancing antioxidative capacity in barley seedlings	2022	Journal of Hazardous Materials	438			
392	Khan M.T.I., Anwar S., Sarkodie S.A., Yaseen M.R., Nadeem A.M., Ali Q.	Comprehensive disaster resilience index: Pathway towards risk-informed sustainable development	2022	Journal of Cleaner Production	366			
393	Tufail M.A., Naeem A., Arif M.S., Farooq T.H., Shahzad S.M., Dar A.A., Albasher G., Shakoor A.	Unraveling the efficacy of nitrification inhibitors (DCD and DMPP) in reducing nitrogen gases emissions across agroecosystems: A three-decade global data synthesis (1993–2021)	2022	Fuel	324			
394	Abdullah Asif H.M., Kamal S., Rehman A.-U., Rasool S., Hamid Akash M.S.	Synthesis, Characterization, and Enzyme Inhibition Properties of 1,2,4-Triazole Bearing Azinane Analogues	2022	ACS Omega	7	36	32360	32368
395	Nazir M.W., Javed T., Ali N., Nazeer M., Khan M.I.	Theoretical investigation of thermal analysis in aluminum and titanium alloys filled in nanofluid through a square cavity having the uniform thermal condition	2022	International Journal of Modern Physics B	36	22		
396	Zhu K., Chen Z., Zong L., Metwally A.S.M., Ali S., Mohammed A.H., Jaszcjur M.	Implementation of Modified Multi-Objective Particle Swarm Optimization to multi-machine power system stability	2022	Journal of Cleaner Production	365			

397	Abdullah M., Ghazanfar S., Ummar R., Shabbir R.	Role of celebrity endorsement in promoting employees' organization identification: A brand-based perspective	2022	Frontiers in Psychology	13			
398	Khan R.W.A., Khan R.S.A., Awan F.S., Akrem A., Iftikhar A., Anwar F.N., Alzahrani H.A.S., Alsamadany H., Iqbal R.K.	Genome-wide association studies of seedling quantitative trait loci against salt tolerance in wheat	2022	Frontiers in Genetics	13			
399	Rashid M.A.R., Zhao Y., Azeem F., Zhao Y., Ahmed H.G.M.-D., Atif R.M., Pan Y., Zhu X., Liang Y., Zhang H., Li D., Zhang Z., Li Z.	Unveiling the genetic architecture for lodging resistance in rice ( <i>Oryza sativa</i> . L) by genome-wide association analyses	2022	Frontiers in Genetics	13			
400	Aslam B., Chaudhry T.H., Arshad M.I., Muzammil S., Siddique A.B., Yasmeen N., Khurshid M., Amir A., Salman M., Rasool M.H., Xia X., Baloch Z.	Distribution and genetic diversity of multi-drug-resistant <i>Klebsiella pneumoniae</i> at the human-animal-environment interface in Pakistan	2022	Frontiers in Microbiology	13			

401	Jabeen R., Iqbal A., Deeba F., Zulfiqar F., Mustafa G., Nawaz H., Habiba U., Nafees M., Zaid A., Siddique K.H.M.	Isolation and characterization of peroxidase P7-like gene and Rab-GDI like gene from potential medicinal plants: A step toward understanding cell defense signaling	2022	Frontiers in Plant Science	13			
402	Ahmad S., Idrees A., Haider M.U., Rasool B., Mehmood R., Afzal A., Javaid A., Shad N., Ashraf S., Li J.	COI-gene Based Molecular Identification of Chilo partellus Swinhoe (Lepidoptera: Pyralidae) Infesting Maize in Lahore, Pakistan	2022	Philippine Agricultural Scientist	105	3	303	308
403	Shakoori M.A., He M.G., Shahzad A., Khan M.	Diffusion Coefficients for Complex Plasmas in Parallel Electric Field	2022	Plasma Physics Reports	48	9	1023	1033
404	Iqbal S.Z., Waqas M., Latif S.	Incidence of Aflatoxin M1 in Milk and Milk Products from Punjab, Pakistan, and Estimation of Dietary Intake	2022	Dairy	3	3	577	586
405	Naqvi S.A.R., Idrees F., Sherazi T.A., Shahzad S.A., Hassan S.U.L., Ashraf N.	TOXICOLOGY OF HEAVY METALS USED IN COSMETICS	2022	Journal of the Chilean Chemical Society	67	3	5615	5622
406	Banoqitah E.M., Hussain M., Khadimallah M.A., Ghandourah E., Yahya A., Basha M., Alshoabi A.	A simplified directly determination of natural frequencies of CNT: Via aspect ratio	2022	Advances in Nano Research	13	3	207	216

407	Ijaz M.U., Mustafa S., Batool R., Naz H., Ahmed H., Anwar H.	Ameliorative effect of herbacetin against cyclophosphamide-induced nephrotoxicity in rats via attenuation of oxidative stress, inflammation, apoptosis and mitochondrial dysfunction	2022	Human and Experimental Toxicology	41			
408	Jamil S., Ilyas M., Khan M.Z., Awan S.I., Rehman S., Shafique S., Hafeez S., Riaz M., Ahmad H.M., Tamkeen A., Ghaffar M.A., Khan M.M.	HERITABILITY, GENETIC GAIN, AND PATH COEFFICIENT ANALYSES IN BLACK GRAM AT POONCH RAWALAKOT, AZAD JAMMU AND KASHMIR	2022	Sabro Journal of Breeding and Genetics	54	3	537	548
409	Irfan A., Zahoor A.F., Kamal S., Hassan M., Kloczkowski A.	Ultrasonic-Assisted Synthesis of Benzofuran Appended Oxadiazole Molecules as Tyrosinase Inhibitors: Mechanistic Approach through Enzyme Inhibition, Molecular Docking, Chemoinformatics, ADMET and Drug-Likeness Studies	2022	International Journal of Molecular Sciences	23	18		
410	Ahmad M.N., Nadeem S., Soltane R., Javed M., Iqbal S., Kanwal Z., Farid M.F., Rabea S., Elkaeed E.B., Aljazzar S.O., Alrbyawi H., Elkhatib W.F.	Synthesis, Characterization, and Antibacterial Potential of Poly(o-anisidine)/BaSO <sub>4</sub> Nanocomposites with Enhanced Electrical Conductivity	2022	Processes	10	9		

411	Khanam A., Ahmad A., Iftikhar N., Ali Q., Fatima T., Alswailmi F.K., Hussain A.I., Alnasser S.M.A., Akhtar J.	Variation in Phenolic Profile, Antioxidant, and Anti-Inflammatory Activities of <i>Salvadora oleoides</i> Decene. and <i>Salvadora persica</i> L. Fruits and Aerial Part Extracts	2022	Life	12	9		
412	Zamir M., Ali N., Naseem A., Ahmed Frasteen A., Zafar B., Assam M., Othman M., Attia E.-A.	Face Detection & Recognition from Images & Videos Based on CNN & Raspberry Pi	2022	Computation	10	9		
413	Kanwal A., Azeem F., Nadeem H., Ashfaq U.A., Aadil R.M., Kober A.K.M.H., Rajoka M.S.R., Rasul I.	Molecular Mechanisms of <i>Cassia fistula</i> against Epithelial Ovarian Cancer Using Network Pharmacology and Molecular Docking Approaches	2022	Pharmaceutics	14	9		
414	Adeel S., Habiba M., Kiran S., Iqbal S., Abrar S., Hassan C.M.	Utilization of Colored Extracts for the Formulation of Ecological Friendly Plant-Based Green Products	2022	Sustainability (Switzerland)	14	18		
415	Bin-Mohsin B., Javed M.Z., Awan M.U., Budak H., Kara H., Noor M.A.	Quantum Integral Inequalities in the Setting of Majorization Theory and Applications	2022	Symmetry	14	9		
416	Waqas H., Oreijah M., Guedri K., Khan S.U., Yang S., Yasmin S., Khan M.I., Bafakeeh O.T., Tag-EIDin E.S.M., Galal A.M.	Gyrotactic Motile Microorganisms Impact on Pseudoplastic Nanofluid Flow over a Moving Riga Surface with Exponential Heat Flux	2022	Crystals	12	9		

	Rahim M.A., Shoukat A., Khalid W., Ejaz A., Itrat N., Majeed I., Koraqi H., Imran M., Nisa M.U., Nazir A., Alansari W.S., Eskandrani A.A., Shamlan G., AL-Farga A.	A Narrative Review on Various Oil Extraction Methods, Encapsulation Processes, Fatty Acid Profiles, Oxidative Stability, and Medicinal Properties of Black Seed ( <i>Nigella sativa</i> )	2022	Foods	11	18		
417	Din M.U., Raza M., Xin Q., YalÄ§in S., Malik S.N.	Close-to-Convexity of q-Besselâ€“Wright Functions	2022	Mathematics	10	18		
418	Ejaz H., Junaid K., Yasmeen H., Naseer A., Alam H., Younas S., Qamar M.U., Abdalla A.E., Abosalif K.O.A., Ahmad N., Bukhari S.N.A.	Multiple Antimicrobial Resistance and Heavy Metal Tolerance of Biofilm-Producing Bacteria Isolated from Dairy and Non-Dairy Food Products	2022	Foods	11	18		
419	Nonlaopon K., Khan A.G., Ameen F., Awan M.U., Cesarano C.	Some New Quantum Numerical Techniques for Solving Nonlinear Equations	2022	Symmetry	14	9		
420	Afzaal M., Saeed F., Ateeq H., Shah Y.A., Hussain M., Javed A., Ikram A., Raza M.A., Nayik G.A., Alfarraj S., Ansari M.J., Karabagias I.K.	Effect of Celluloseâ€“Chitosan Hybrid-Based Encapsulation on the Viability and Stability of Probiotics under Simulated Gastric Transit and in Kefir	2022	Biomimetics	7	3		
421								

422	Mustafa G., Huo W., Pervaiz A., Ullah M.R., Zulfiqar M.	Validating LA/AIDS model in the food market of Pakistan	2022	Heliyon	8	9		
423	Ejaz H., Qamar M.U., Junaid K., Younas S., Taj Z., Bukhari S.N.A., Abdalla A.E., Abosalif K.O.A., Ahmad N., Saleem Z., Salem E.H.M.	The Molecular Detection of Class B and Class D Carbapenemases in Clinical Strains of <i>Acinetobacter calcoaceticus-baumannii</i> Complex: The High Burden of Antibiotic Resistance and the Co-Existence of Carbapenemase Genes	2022	Antibiotics	11	9		
424	Iqbal S.Z., Waqas M., Razis A.F.A., Usman S., Ali N.B., Asi M.R.	Variation of Aflatoxin Levels in Stored Edible Seed and Oil Samples and Risk Assessment in the Local Population	2022	Toxins	14	9		
425	Naz F., Verpoort F., Iqbal S.Z., Naheed N., Asi M.R.	Seasonal Variation of Aflatoxin Levels in Selected Spices Available in Retail Markets: Estimation of Exposure and Risk Assessment	2022	Toxins	14	9		
426	Ismail S., Alsowayeh N., Abbasi H.W., Albutti A., Tahir ul Qamar M., Ahmad S., Raza R.Z., Sadia K., Abbasi S.W.	Pan-Genome-Assisted Computational Design of a Multi-Epitopes-Based Vaccine Candidate against <i>Helicobacter cinaedi</i>	2022	International Journal of Environmental Research and Public Health	19	18		

427	Khan I.A., Saddique F.A., Aslam S., Ashfaq U.A., Ahmad M., Al-Hussain S.A., Zaki M.E.A.	Synthesis of Novel N-Methylmorpholine-Substituted Benzimidazolium Salts as Potential $\beta$ -Glucosidase Inhibitors	2022	Molecules	27	18		
428	Sadiqa A., Rasul A., Hassan M., Sultana S., Jabeen F.	Identification of Novel Natural Inhibitors to Human 3-Phosphoglycerate Dehydrogenase (PHGDH) for Cancer Treatment	2022	Molecules	27	18		
429	Usman M., Jahanger A., Makhdum M.S.A., Radulescu M., Balsalobre-Lorente D., Jianu E.	An Empirical Investigation of Ecological Footprint Using Nuclear Energy, Industrialization, Fossil Fuels and Foreign Direct Investment	2022	Energies	15	17		
430	Akram N., Usman M., Haider S., Akhtar M.S., Gul K.	Impact of Diisocyanates on Morphological and In Vitro Biological Efficacy of Eco-Friendly Castor-Oil-Based Water-Borne Polyurethane Dispersions	2022	Polymers	14	17		
431	Manan A., Rehman S.U., Fatima N., Imran M., Ali B., Shah N.A., Chung J.D.	Dynamics of Eyring-Powell Nanofluids When Bioconvection and Lorentz Forces Are Significant: The Case of a Slender Elastic Sheet of Variable Thickness with Porous Medium	2022	Mathematics	10	17		

	Ahmad M.N., Nadeem S., Javed M., Iqbal S., Hassan S.U., Aljazzar S.O., Elkaeed E.B., Pashameah R.A., Alzahrani E., Farouk A.-E., Alotaibi M.T., Abd-Rabboh H.S.M.	Improving the Thermal Behavior and Flame-Retardant Properties of Poly(o-anisidine)/MMT Nanocomposites Incorporated with Poly(o-anisidine) and Clay Nanofiller	2022	Molecules	27	17		
432	Farooq S., Aziz H., Ali S., Murtaza G., Rizwan M., Saleem M.H., Mahboob S., Al-Ghanim K.A., Riaz M.N., Murtaza B.	Synthesis of Functionalized Carboxylated Graphene Oxide for the Remediation of Pb and Cr Contaminated Water	2022	International Journal of Environmental Research and Public Health	19	17		
433	Saadullah M., Farid A., Ali A., Rashad M., Naseem F., Rashid S.A., Ghazanfar S., Yasin M., Akhtar N., Almuhayawi M.S., Alruhaili M.H., Selim S.	Molecular Modeling Study of Novel Lancifolamide Bioactive Molecule as an Inhibitor of Acetylcholinesterase (AChE), Herpes Simplex Virus (HSV-1), and Anti-proliferative Proteins	2022	Molecules	27	17		
434	Noor R., Zahoor A.F., Irfan M., Hussain S.M., Ahmad S., Irfan A., Kotwica-Mojzych K., Mojzych M.	Transition Metal Catalyzed Hiyama Cross-Coupling: Recent Methodology Developments and Synthetic Applications	2022	Molecules	27	17		
435								

436	Peng S., Huang T., Kouser T., Zhuang X.-R., Xiong Y.-L., Yu P.	Wake asymmetry weakening in viscoelastic fluids: Numerical discovery and mechanism exploration	2022	Physics of Fluids	34	9		
437	Rashid F., Javaid A., Mahmood-ur-Rahman, Ashfaq U.A., Sufyan M., Alshammari A., Alharbi M., Nisar M.A., Khurshid M.	Integrating Pharmacological and Computational Approaches for the Phytochemical Analysis of Syzygium cumini and Its Anti-Diabetic Potential	2022	Molecules	27	17		
438	Alqarni M.S., Farooq U., Manzoor U., Imran M., Muhammad T., Waqas H.	Significance of Cattaneo-Christov heat flux in Darcy-Forchheimer transport of nanofluid with entropy optimization	2022	Advances in Mechanical Engineering	14	9		
439	Rashid S., Jarad F., Alsharidi A.K.	Numerical investigation of fractional-order cholera epidemic model with transmission dynamics via fractalâ€“fractional operator technique	2022	Chaos, Solitons and Fractals	162			
440	Afzaal M., Saeed F., Hussain M., Ismail Z., Siddeeg A., AL-Farga A., Aljobair M.O.	Influence of encapsulation on the survival of probiotics in food matrix under simulated stress conditions	2022	Saudi Journal of Biological Sciences	29	9		

441	Haider J., Shahzadi A., Akbar M.U., Hafeez I., Shahzadi I., Khalid A., Ashfaq A., Ahmad S.O.A., Dilpazir S., Imran M., Ikram M., Ali G., Khan M., Khan Q., Maqbool M.	A review of synthesis, fabrication, and emerging biomedical applications of metal-organic frameworks	2022	Biomaterials Advances	140			
442	Nosheen A., Hussain M.T., Khalid M., Javid A., Aziz H., Iqbal S., Ashraf M., Ali S.	Development of protective cotton textiles against biohazards and harmful UV radiation using eco-friendly novel fiber-reactive bioactive agent	2022	Process Safety and Environmental Protection	165		431	444
443	Munir T., Imran M., Muzammil S., Hussain A.A., Fakhar-e Alam M., Mahmood A., Sohail A., Atif M., Shafeeq S., Afzal M.	Antimicrobial activities of polyethylene glycol and citric acid coated graphene oxide-NPs synthesized via Hummer's method	2022	Arabian Journal of Chemistry	15	9		
444	Ayub A., Srithilat K., Fatima I., Panduro-Tenazoa N.M., Ahmed I., Akhtar M.U., Shabbir W., Ahmad K., Muhammad A.	Arsenic in drinking water: overview of removal strategies and role of chitosan biosorbent for its remediation	2022	Environmental Science and Pollution Research	29	43	64312	64344

445	Sohail M., Bilal M., Maqbool T., Rasool N., Ammar M., Mahmood S., Malik A., Zubair M., Abbas Ashraf G.	Iron-catalyzed synthesis of N-heterocycles via intermolecular and intramolecular cyclization reactions: A review	2022	Arabian Journal of Chemistry	15	9		
446	Shakeel S., Nawaz H., Majeed M.I., Rashid N., Javed M.R., Tariq A., Majeed B., Sehar A., Murtaza S., Sadaf N., Rimsha G., Amin I.	Surface-enhanced Raman spectroscopic analysis of centrifugally filtered blood serum samples of hepatitis C patients	2022	Photodiagnosis and Photodynamic Therapy	39			
447	Imran Kanjal M., Muneer M., Saeed M., Chu W., Alwadai N., Iqbal M., Abdelhaleem A.	Oxone activated TiO <sub>2</sub> in presence of UV-LED light for the degradation of moxifloxacin: A mechanistic study	2022	Arabian Journal of Chemistry	15	9		
448	uz Zaman Q., Abbasi A., Tabassum S., Ashraf K., Ahmad Z., Siddiqui M.H., Alamri S., Maqsood S., Sultan K.	Calcium induced growth, physio-biochemical, antioxidants, osmolytes adjustments and phytoconstituents status in spinach under heat stress	2022	South African Journal of Botany	149		701	711
449	Ali M., Parveen A., Malik Z., Kamran M., Saleem M.H., Abbasi G.H., Ahmad I., Ahmad S., Sathish M., Okla M.K., Al-Amri S.S., Alaraidh I.A.,	Zn alleviated salt toxicity in Solanum lycopersicum L. seedlings by reducing Na <sup>+</sup> transfer, improving gas exchange, defense system and Zn contents	2022	Plant Physiology and Biochemistry	186		52	63

	Ali S.							
450	Anwar S., Hussain B., Usman M., Asif Ali Naqvi S., Ahmad Shah A.	Consumersâ€™ switching intentions from conventional to green vehicles in the context of smog risk in Pakistan	2022	Case Studies on Transport Policy	10	3	1695	1705
451	Keebayoon A., Mungmumpuntipantip R., Wiwanitkit V.	War in Ukraine and women's and perinatal health: Correspondence	2022	Sexual and Reproductive Healthcare	33			
452	Nasir N., Rashid M.H., Cheema S.A., Rasheed A., Sabir N., Tanveer Z., Hassan T., Anjam Q.	An experimental and simulation evaluation of the structural, morphological and optical characters of ZnO-based nano-fibers doped with Ag and ZrO <sub>2</sub>	2022	Optik	265			
453	Mahmood S., Wahid A., Azeem M., Zafar S., Bashir R., Sharif O., Ali S.	Tyrosine or lysine priming modulated phenolic metabolism and improved cadmium stress tolerance in mung bean ( <i>Vigna radiata</i> L.)	2022	South African Journal of Botany	149		397	406
454	Nawaz A., Aslam S., Ahmad M., Zahoor A.F., Naqvi S.A.R.	Synthetic strategies of pyran derivatives by multicomponent reaction (MCR) approach	2022	Journal of the Iranian Chemical Society	19	9	3721	3768
455	Rasheed S., Rehman K., Shahid M., Suhail S.,	Therapeutic potentials of genistein: New insights and perspectives	2022	Journal of Food Biochemistry	46	9		

	Akash M.S.H.							
456	Hussain A., Akbar M.	Dividend policy and earnings management: Do agency problem and financing constraints matter?	2022	Borsa Istanbul Review	22	5	839	853
457	Chen F., Aqeel M., Maqsood M.F., Khalid N., Irshad M.K., Ibrahim M., Akhter N., Afzaal M., Ma J., Hashem M., Alamri S., Noman A., Lam S.S.	Mitigation of lead toxicity in Vigna radiata genotypes by silver nanoparticles	2022	Environmental Pollution	308			
458	Sibiya A., Gopi N., Jeyavani J., Mahboob S., Al-Ghanim K.A., Sultana S., Mustafa A., Govindarajan M., Vaseeharan B.	Comparative toxicity of silver nanoparticles and silver nitrate in freshwater fish <i>Oreochromis mossambicus</i> : A multi-biomarker approach	2022	Comparative Biochemistry and Physiology Part - C: Toxicology and Pharmacology	259			
459	Abbas H.W., Guo X., Anwar B., Naqvi S.A.A., Shah S.A.R.	The land degradation neutrality management enablers, challenges, and benefits for mobilizing private investments in Pakistan	2022	Land Use Policy	120			

460	Nasir S., Walters K.F.A., Pereira R.M., Waris M., Ali Chatha A., Hayat M., Batool M.	Larvicidal activity of acetone extract and green synthesized silver nanoparticles from Allium sativum L. (Amaryllidaceae) against the dengue vector Aedes aegypti L. (Diptera: Culicidae)	2022	Journal of Asia-Pacific Entomology	25	3		
461	Abbas M., Shaheen S., Arshad A., Ali M., Rasool B., Rasool G.	Comparative light and scanning electron microscopic studies of pollen of two marijuana species causing allergies	2022	Microscopy Research and Technique	85	9	3181	3186
462	Sharif Z., Akhtar M.F., Sharif H., Saleem A., Khan M.I., Riaz A.	Endocrine disruption: Reproductive toxicity of glyceryl trinitrate and isosorbide mononitrate in male Wistar rats	2022	Andrologia	54	8		
463	Shabbir A., Rehman K., Akash M.S.H., Akbar M., Chaudhary Z., Panichayupakaranant P., Shah M.A.	Differential neuroprotective effect of curcuminoid formulations in aluminum chloride-induced Alzheimerâ€™s disease	2022	Environmental Science and Pollution Research	29	45	67981	67996
464	Naheed R., Zahid M., Aqeel M., Maqsood M.F., Kanwal H., Khalid N., Hashem M., Alamri S., Noman A.	Mediation of Growth and Metabolism of Pisum sativum in Salt Stress Potentially Be Credited to Thiamine	2022	Journal of Soil Science and Plant Nutrition	22	3	2897	2910

465	Razzaq M.K., Akhter M., Ahmad R.M., Cheema K.L., Hina A., Karikari B., Raza G., Xing G., Gai J., Khurshid M.	CRISPR-Cas9 based stress tolerance: New hope for abiotic stress tolerance in chickpea ( <i>Cicer arietinum</i> )	2022	Molecular Biology Reports	49	9	8977	8985
466	Farooq U., Waqas H., Imran M., Albakri A., Muhammad T.	Numerical investigation for melting heat transport of nanofluids due to stretching surface with Cattaneo-Christov thermal model	2022	Alexandria Engineering Journal	61	9	6635	6644
467	Shahid A., Khurshid M., Aslam B., Muzammil S., Mehwish H.M., Rajoka M.S.R., Hayat H.F., Sarfraz M.H., Razzaq M.K., Nisar M.A., Waseem M.	Cyanobacteria derived compounds: Emerging drugs for cancer management	2022	Journal of Basic Microbiology	62	9	1125	1142
468	Arshad N., Zia K.M., Hussain M.T., Zuber M., Arshad M.M.	Synthesis of novel curcumin-based aqueous polyurethane dispersions for medical textile diligences with potential of antibacterial activities	2022	Polymer Bulletin	79	9	7711	7727
469	Berkia A., Benguediab S., Menasria A., Bouhadra A., Bourada F., Mamen B., Tounsi A., Benrahou K.H., Benguediab M., Hussain M.	Static buckling analysis of bi-directional functionally graded sandwich (BFGSW) beams with two different boundary conditions	2022	Steel and Composite Structures	44	4	503	517

470	Ma J., Saleem M.H., Ali B., Rasheed R., Ashraf M.A., Aziz H., Ercisli S., Riaz S., Elsharkawy M.M., Hussain I., Alhag S.K., Ahmed A.E., Vodnar D.C., Mumtaz S., Marc R.A.	Impact of foliar application of syringic acid on tomato ( <i>Solanum lycopersicum L.</i> ) under heavy metal stress-insights into nutrient uptake, redox homeostasis, oxidative stress, and antioxidant defense	2022	Frontiers in Plant Science	13			
471	Zubair A., Baharun R., Kiran F., Abro M.A.	Understanding the Airbnb user continuation intention: The moderating role of perceived risk	2022	Frontiers in Psychology	13			
472	Mengkebayaer M., Nawaz M.A., Sajid M.U.	Eco-destination loyalty: Role of perceived value and experience in framing destination attachment and equity with moderating role of destination memory	2022	Frontiers in Psychology	13			
473	Ali B., Saleem M.H., Ali S., Shahid M., Sagir M., Tahir M.B., Qureshi K.A., Jaremko M., Selim S., Hussain A., Rizwan M., Ishaq W., Rehman M.Z.-U.	Mitigation of salinity stress in barley genotypes with variable salt tolerance by application of zinc oxide nanoparticles	2022	Frontiers in Plant Science	13			
474	Yao L., Ayub A., Ishaq M., Arif S., Fatima T., Sohail H.M.	Workplace ostracism and employee silence in service organizations: the moderating role of negative reciprocity beliefs	2022	International Journal of Manpower	43	6	1378	1404

475	Ma J., Saleem M.H., Yasin G., Mumtaz S., Qureshi F.F., Ali B., Ercisli S., Alhag S.K., Ahmed A.E., Vodnar D.C., Hussain I., Marc R.A., Chen F.	Individual and combinatorial effects of SNP and NaHS on morpho-physio-biochemical attributes and phytoextraction of chromium through Cr-stressed spinach ( <i>Spinacia oleracea</i> L.)	2022	Frontiers in Plant Science	13			
476	Ullah I., Al-Harbi F.F., ul Ahmad A., Mahmood K., Ali A., Ikram S., Amin N., Javaid K., Amami M., Arif Sajjad M., Yasir Ali M., Sharafat Hussain M.	Growth and characterization of GeSnO thin films for thermoelectric power generation applications	2022	Chemical Physics Letters	801			
477	Jamal M.A., Ahmad Sajid T., Saeed M., Naseem B., Muneer M.	Explication of molecular interactions between leucine and pharmaceutical active ionic liquid in an aqueous system: Volumetric and acoustic studies	2022	Journal of Molecular Liquids	360			
478	Iqbal M.F., Ullah K., Yaqoob M.M., Khan A.A., Farid S., Zhu P., Wang D.	Anharmonic phonon coupling and decay of optical phonons in polycrystalline CdSe thin films	2022	Ceramics International	48	16	23862	23869
479	Ashfaq M., Ali A., Tahir M.N., Kuznetsov A., Munawar K.S., Muhammad S.	Synthesis, single-crystal exploration, hirshfeld surface analysis, and DFT investigation of the thiosemicarbazones	2022	Journal of Molecular Structure	1262			

	Jinghong Y., Junaid Irshad M., Irshad M., Khalil I., Zahoor S., Akram M., Muddasar Saeed M., Jafari-Sales A., Elbossaty W.F., Said M.B., Aharwal R.P., Hamid G.A., Mbaye E.H.S., El-Ashram S., Ataa A.M.A., Kiliç O.	Impact of the coronavirus pandemic on mental prosperity of medical care laborers in tertiary consideration hospital: A case report	2022	Medicine (United States)	101	32	E29485	
480	Manzoor F., Nisa M.-U., Shakoor A., Hussain L., Mahmood A., Younas A.	Effect of sodium alginate supplementation on weight management and reproductive hormones in polycystic females	2022	Food and Function	13	19	9847	9855
481	Ahmad H.M., Fiaz S., Hafeez S., Zahra S., Shah A.N., Gul B., Aziz O., Mahmood-Ur-Rahman, Fakhar A., Rafique M., Chen Y., Yang S.H., Wang X.	Plant Growth-Promoting Rhizobacteria Eliminate the Effect of Drought Stress in Plants: A Review	2022	Frontiers in Plant Science	13			
482	Ali R., Babar R., Asgher M., Mustafa G.	Tunneling analysis of null aether black hole theory in the background of Newman-Janis algorithm	2022	International Journal of Modern Physics A	37	22		
483								

484	Hassoun A., Cropotova J., Trif M., Rusu A.V., BobiÅŸ O., Nayik G.A., Jagdale Y.D., Saeed F., Afzaal M., Mostashari P., Khaneghah A.M., Regenstein J.M.	Consumer acceptance of new food trends resulting from the fourth industrial revolution technologies: A narrative review of literature and future perspectives	2022	Frontiers in Nutrition	9			
485	Maqbool Z., Abid A., Bhutta A.I.	Effect of corporate social responsibility performance on dividend pay-out: Role of corporate governance quality	2022	Frontiers in Psychology	13			
486	Raza Shah A., Rasool N., BÄ±lal M., MubarÄ±k A., AlÄ± HashmÄ± M., Nadeem Akhtar M., Imran M., Ahmad G., Siddiq A., Adnan AlÄ± Shah S.	Efficient Synthesis of 4-Bromo-N-(1-phenylethyl)benzamide, Arylation by Pd(0) Catalyst, Characterization and DFT Study	2022	ChemistrySelect	7	29		
487	Sun J., Shen H., Ibn-ul-Hassan S., Riaz A., Domil A.E.	The association between digitalization and mental health: The mediating role of wellbeing at work	2022	Frontiers in Psychiatry	13			
488	Waseem W., Anwar F., Saleem U., Ahmad B., Zafar R., Anwar A., Saeed Jan M., Rashid U., Sadiq A., Ismail T.	Prospective Evaluation of an Amide-Based Zinc Scaffold as an Anti-Alzheimer Agent: In Vitro, in Vivo, and Computational Studies	2022	ACS Omega	7	30	26723	26737

489	Ahmed T., Noman M., Jiang H., Shahid M., Ma C., Wu Z., Nazir M.M., Ali M.A., White J.C., Chen J., Li B.	Bioengineered chitosan-iron nanocomposite controls bacterial leaf blight disease by modulating plant defense response and nutritional status of rice ( <i>Oryza sativa L.</i> )	2022	Nano Today	45			
490	Ahmad S., Cherif N., Naseer S., Ijaz U., Faouri Y.S., Ghaffar A., Hussein M.	A wideband circularly polarized CPW-fed substrate integrated waveguide based antenna array for ISM band applications	2022	Heliyon	8	8		
491	Hussain M., Sharif H., Khadimallah M.A., Ayed H., Banoqitah E.M., Loukil H., Ali I., Mahmoud S.R., Tounsi A.	Numerical calculations for bioconvection MHD Casson nanofluid flow: Study of Brownian motion	2022	Computers and Concrete	30	2	143	150
492	Shahbaz P., ul Haq S., Abbas A., Batool Z., Alotaibi B.A., Nayak R.K.	Adoption of Climate Smart Agricultural Practices through Women Involvement in Decision Making Process: Exploring the Role of Empowerment and Innovativeness	2022	Agriculture (Switzerland)	12	8		
493	Naqqash T., Aziz A., Babar M., Hussain S.B., Haider G., Shahid M., Qaisrani M.M., Arshad M., Hanif M.K., Mancinelli R., Radicetti E.	Lead-Resistant <i>Morganella morganii</i> Rhizobacteria Reduced Lead Toxicity in <i>Arabidopsis thaliana</i> by Improving Growth, Physiology, and Antioxidant Activities	2022	Agriculture (Switzerland)	12	8		

494	Sharif H., Hussain M., Khadimallah M.A., Ayed H., Taj M., Bhutto J.K., Mahmoud S.R., Iqbal Z., Ahmad S., Tounsi A.	Theoretical fabrication of Williamson nanoliquid over a stretchable surface	2022	Advances in Concrete Construction	14	2	103	113
495	Rehman S.U., Fatima N., Ali B., Imran M., Ali L., Shah N.A., Chung J.D.	The Casson Dusty Nanofluid: Significance of Darcyâ€“Forchheimer Law, Magnetic Field, and Non-Fourier Heat Flux Model Subject to Stretch Surface	2022	Mathematics	10	16		
496	Syed M.A., Aziz G., Jehangir M.B., Tabish T.A., Zahoor A.F., Khalid S.H., Khan I.U., Hosny K.M., Rizg W.Y., Hanif S., Arshad R., Abdul Qayyum M., Irfan M.	Evaluating Novel Agarose-Based Buccal Gels Scaffold: Mucoadhesive and Pharmacokinetic Profiling in Healthy Volunteers	2022	Pharmaceutics	14	8		
497	Shi L., Arif M., Raza M., Abbas M.	Hankel Determinant Containing Logarithmic Coefficients for Bounded Turning Functions Connected to a Three-Leaf-Shaped Domain	2022	Mathematics	10	16		
498	Wakil W., Tahir M., Ghazanfar M.U., Qayyum M.A., Yasin M., Maqsood S., Asrar M., Shapiro-Ilan D.I.	Microbes, <i>Dodonaea viscosa</i> and Chlorantraniliprole as Components of <i>Helicoverpa armigera</i> IPM Program: A Three Region Open-Field Study	2022	Agronomy	12	8		

499	Yar A., Choudary M.A., Rehman A., Hussain A., Elahi A., ur Rehman F., Waqar A.B., Alshammari A., Alharbi M., Nisar M.A., Khurshid M., Khan Z.	Genetic Diversity and Virulence Profiling of Multi-Drug Resistant Escherichia coli of Human, Animal, and Environmental Origins	2022	Antibiotics	11	8		
500	Samiullah K., Draz O., Yasin R., Rasool B., Muhammad Ishaq H., Haris Aziz M., Mehroz Fazal R., Naz S., Raza T., Niazi R.	New Discovery of Hipparrison theobaldi Skull from the Late Miocene of Padhri, District Jhelum, Punjab, Pakistan and Associated Mammalian Fossil Assemblage	2022	Acta Geologica Sinica (English Edition)	96	4	1150	1165
501	Zahra S.I., Iqbal M.J., Ashraf S., Aslam A., Ibrahim M., Yamin M., Vithanage M.	Comparison of Ambient Air Quality among Industrial and Residential Areas of a Typical South Asian City	2022	Atmosphere	13	8		
502	Islam M., Alharbi M.A., Alharbi N.K., Rafiq S., Shahbaz M., Murtaza S., Raza N., Farooq U., Ali M., Imran M., Ali S.	Effect of Inulin on Organic Acids and Microstructure of Synbiotic Cheddar-Type Cheese Made from Buffalo Milk	2022	Molecules	27	16		
503	Bin L., Shahzad M., Javed H., Muqeet H.A., Akhter M.N., Liaqat R., Hussain M.M.	Scheduling and Sizing of Campus Microgrid Considering Demand Response and Economic Analysis	2022	Sensors	22	16		

504	Bouchareb M.L., Semmah A., Bourada F., Tounsi A., Heireche H., Benzair A., Hussain M.	A Study of Longitudinal Magnetic Field Effect on Critical Buckling Loads of SWCNT Embedded in Kerr Medium Using Nonlocal Euler-Bernoulli Theory	2022	Physical Mesomechanics	25	4	344	352
505	Saadullah M., Asif M., Arif S., Kanwal B.	A Comprehensive Review on Traditional Uses, Chemical Constituents, and Diverse Pharmacological Importance of the Genus Breynia	2022	Records of Natural Products	16	6	538	549
506	Usman M., Shaukat Q.-U-A., Khokhar M.I., Bilal R., Khan R.R., Saeed H.A., Ali M., Khan H.M.	Comparative pharmacokinetics of valproic acid among Pakistani and South Korean patients: A population pharmacokinetic study	2022	PLoS ONE	17	45512		
507	Nonlaopon K., Khan A.G., Ameen F., Awan M.U., Cesarano C.	Multi-Step Quantum Numerical Techniques for Finding the Solutions of Nonlinear Equations	2022	Mathematics	10	15		
508	Awan M.U., Javed M.Z., Slimane I., Kashuri A., Cesarano C., Nonlaopon K.	(q1,q2)-Trapezium-Like Inequalities Involving Twice Differentiable Generalized m-Convex Functions and Applications	2022	Fractal and Fractional	6	8		
509	Shahzad A., Zafar B., Ali N., Jamil U., Alghadban A.J., Assam M., Ghamry N.A., Eldin E.T.	COVID-19 Vaccines Related User's Response Categorization Using Machine Learning Techniques	2022	Computation	10	8		

510	Ahmad H.M., Wang X., Ijaz M., Mahmood-Ur-Rahman M., Oranab S., Ali M.A., Fiaz S.	Molecular Aspects of MicroRNAs and Phytohormonal Signaling in Response to Drought Stress: A Review	2022	Current Issues in Molecular Biology	44	8	3695	3710
511	Yousaf M., Chang D., Liu Y., Liu T., Zhou X.	Neuroprotection of Cannabidiol, Its Synthetic Derivatives and Combination Preparations against Microglia-Mediated Neuroinflammation in Neurological Disorders	2022	Molecules	27	15		
512	Rasool B., Mahmood-ur-Rahman, Zubair M., Khan M.A., Ramzani P.M.A., Dradrach A., Turan V., Iqbal M., Khan S.A., Tauqeer H.M., Farhad M., Virk Z.A., Iqbal M.	Synergetic Efficacy of Amending Pb-Polluted Soil with P-Loaded Jujube ( <i>Ziziphus mauritiana</i> ) Twigs Biochar and Foliar Chitosan Application for Reducing Pb Distribution in Moringa Leaf Extract and Improving Its Anti-cancer Potential	2022	Water, Air, and Soil Pollution	233	8		
513	Salman M., Javed M.R., Ali H., Mustafa G., Tariq A., Sahar T., Naheed S., Gill I., Abid M., Tawab A.	Bioprotection of <i>Zea mays</i> L. from aflatoxigenic <i>Aspergillus flavus</i> by <i>Loigolactobacillus coryniformis</i> BCH-4	2022	PLoS ONE	17	45512		
514	Hafeez F., Zahoor A.F., Rasul A., Mansha A., Noreen R., Raza Z., Ali K.G., Irfan A., El-Hiti G.A.	Ultrasound-Assisted Synthesis and In Silico Modeling of Methanesulfonyl-Piperazine-Based Dithiocarbamates as Potential Anticancer, Thrombolytic, and Hemolytic Structural Motifs	2022	Molecules	27	15		

515	Islam A.U., Iqbal M.M., Imran M., Tariq M.A., Nadeem M., Kakar M.Q., Nawaz M., Amjad M., Qaisrani S.A., Rizwan M., Ali S.	Potential of Fish Scale Biochar Nanocomposite with ZnO for Effective Sequestration of Cr (VI) from Water: Modeling and Kinetics	2022	International Journal of Environmental Research	16	4		
516	Mustafa A., Yaqoob N., Almas M., Kamal S., Zia K.M., Rehman S.	Adsorptive removal of Drimarene Brilliant Blue by thermo stable and eco-friendly graphene oxide reinforced polyvinyl alcohol hydrogels with high reusability potential	2022	Journal of Polymer Research	29	8		
517	Rashid S., Iqbal M.K., Alshehri A.M., Ashraf R., Jarad F.	A comprehensive analysis of the stochastic fractalâ€“fractional tuberculosis model via Mittag-Leffler kernel and white noise	2022	Results in Physics	39			
518	Waqas H., Farooq U., Liu D., Imran M., Muhammad T., Alshomrani A.S., Umar M.	Comparative analysis of hybrid nanofluids with Cattaneo-Christov heat flux model: A thermal case study	2022	Case Studies in Thermal Engineering	36			
519	Atif M., Mustaan M.A., Falak S., Ghaffar A., Munir B.	Targeting the effect of sofosbuvir on selective oncogenes expression level of hepatocellular carcinoma Ras/Raf/MEK/ERK pathway in Huh7 cell line	2022	Saudi Journal of Biological Sciences	29	8		

520	Zulfiqar W., Alay-e-Abbas S.M.	Improved thermodynamic stability and visible light absorption in Zr+X codoped (X=S, Se and Te) BaTiO <sub>3</sub> photocatalysts: A first-principles study	2022	Materials Today Communications	32			
521	Nasir S., Ahmed I., Hussain B., Ijaz M.U., Hafeez F., Wadaan M.A., Atique U., Mahboob S.	A study on the role of aedes mosquitoes in arboviruses and SARS-CoV-2 infection: A new challenge	2022	Journal of King Saud University - Science	34	6		
522	Hussnain Siddique M., Andleeb R., Ashraf A., Zubair M., Fakhar-e-Alam M., Hayat S., Muzammil S., Atif M., Shafeeq S., Afzal M.	Integration of in silico and in vitro approaches to evaluate antioxidant and anticancer properties of <i>Tribulus terrestris</i> extracts	2022	Arabian Journal of Chemistry	15	8		
523	Naz F., Malik A., Riaz M., Mahmood Q., Mehmood M.H., Rasool G., Mahmood Z., Abbas M.	Bromocriptine therapy: Review of mechanism of action, safety and tolerability	2022	Clinical and Experimental Pharmacology and Physiology	49	8	903	922
524	Asrar M., Ali S., Mushtaq N., Zia K., Bibi R., Akhtar I., Hussain D., Li Y., Niaz Y., Al wahabi M.S., Elshikh M.S., Kubik S.	Toxicity of neem seed extract and different insecticides on <i>Trichogramma chilonis</i> (Hymenoptera: Trichogrammatidae)	2022	Journal of King Saud University - Science	34	6		

	Syamimi Zaidi N., Syafiuddin A., Sillanpää M., Burhanuddin Bahrodin M., Zhang Zhan L., Ratnasari A., Kadier A., Aamer Mehmood M., Boopathy R.	Insights into the potential application of magnetic field in controlling sludge bulking and foaming: A review	2022	Bioresource Technology	358			
525	Rashid S., Khalid A., Karaca Y., Chu Y.-M.	REVISITING FEJér-HERMITE-HADAMARD TYPE INEQUALITIES IN FRACTAL DOMAIN AND APPLICATIONS	2022	Fractals	30	5		
526	Ishfaq M., Shahid A., Javed M.R., Afzal M., Mehmood M.A.	Soil-free cultivation of Leptochloa fusca in the urban and industrial wastewaters produced a low-lignin biomass for bioethanol production	2022	Sustainable Energy Technologies and Assessments	52			
527	Rashid S., Khalid A., Karaca Y., Hammouch Z., Chu Y.-M.	NEW GENERALIZATION INVOLVING CONVEX FUNCTIONS VIA h-DISCRETE AB-FRACTIONAL SUMS AND THEIR APPLICATIONS IN FRACTIONAL DIFFERENCE EQUATIONS	2022	Fractals	30	5		
528	Akram M., Thiruvengadam M., Zainab R., Daniyal M., Bankole M.M., Rebezov M., Shariati M.A., Okuskhanova E.	Herbal Medicine for the Management of Laxative Activity	2022	Current Pharmaceutical Biotechnology	23	10	1269	1283

530	SanaUllah I., Khan H.N., Saleha M., Imran M., Raza M.A., Sajjad A., Sabri A.N., Naseem S., Riaz S.	Free radical scavenging and antimicrobial activities of MW assisted sol-gel synthesized honey mediated zirconia	2022	Journal of Sol-Gel Science and Technology	103	2	457	475
531	Rasheed R., Ashraf M.A., Ahmad S.J.N., Parveen N., Hussain I., Bashir R.	Taurine regulates ROS metabolism, osmotic adjustment, and nutrient uptake to lessen the effects of alkaline stress on <i>Trifolium alexandrinum L.</i> plants	2022	South African Journal of Botany	148		482	498
532	Tahir M., Shahid M., Nawaz F., Ahmad I., Ijaz M., Farooq A.B.U., Akram M., Khalid U., Naqqash T., Mehmood S., Mubeen M., Sarfaraz M., Abbas Y.	Efficacy of organic-based carrier material for plant beneficial rhizobacteria application in okra under normal and salt-affected soil conditions	2022	Journal of Applied Microbiology	133	2	943	959
533	Wang D., Saleem M.F., Javid M., Qu X., Farid A., Irfan M., Xu X., Dong X.	Formation of Sn filled CNTs nanocomposite: Study of their magnetic, dielectric properties and enhanced microwave absorption performance at gigahertz frequencies	2022	Ceramics International	48	15	22002	22012
534	Hussain M., Hussain S.M., Iqbal R., Shahzad M.M., Hussain Shah S.Z., Akram A.M., Ahmad N., Hassan Arsalan M.Z.U.	Effect of Citric Acid Acidified <i>Moringa oleifera</i> Seed Meal based Diet on Minerals Absorption, Carcass Composition and Hematological Indices of <i>Cirrhinus mrigala</i> Fingerlings	2022	Pakistan Journal of Zoology	54	4	1737	1745

535	Siddique R., Mehmood M.H., Haris M., Saleem A., Chaudhry Z.	Promising role of polymeric nanoparticles in the treatment of rheumatoid arthritis	2022	Inflammopharmacology	30	4	1207	1218
536	Iftikhar R., Zahoor A.F., Ahmad S., Haq A.U., Naheed S.	Revisiting the Synthesis of Betti Bases: Facile, One-pot, and Efficient Synthesis of Betti Bases Promoted by FeCl <sub>3</sub> ·6H <sub>2</sub> O	2022	Current Organic Synthesis	19	5	569	577
537	Ali L., Shaheen M.R., Ihsan M.Z., Masood S., Zubair M., Shehzad F., Khalid A.-U.-H.	Growth, photosynthesis and antioxidant enzymes modulations in broccoli ( <i>Brassica oleracea</i> L. var. <i>italica</i> ) under salinity stress	2022	South African Journal of Botany	148		104	111
538	Muneer F., Rasul I., Qasim M., Sajid A., Nadeem H.	Optimization, Production and Characterization of Polyhydroxyalkanoate (PHA) from Indigenously Isolated Novel Bacteria	2022	Journal of Polymers and the Environment	30	8	3523	3533
539	Tabassum S., Zahoor A.F., Ali K.G., Irfan M., Hussain S.M., Akhtar R.	Transition metal-catalyzed C-H Alkylation as versatile tools for synthetic transformations: a review	2022	Journal of the Iranian Chemical Society	19	8	3285	3315
540	Qader A., Rehman K., Akash M.S.H.	Biochemical profiling of lead-intoxicated impaired lipid metabolism and its amelioration using plant-based bioactive compound	2022	Environmental Science and Pollution Research	29	40	60414	60425

541	Munir F., Waseem M.T., Khan Z.A., Majeed S., Farooq U., Shahzad S.A.	Synthesis of AIEE active triazine based new fluorescent and colorimetric probes: A reversible mechanochromism and sequential detection of picric acid and ciprofloxacin	2022	Journal of Photochemistry and Photobiology A: Chemistry	429			
542	Ahmad I., Ahmad H.R., Farooqi Z.U.R., Sabir M., Rizwan M., Maqsood M.A.	Apportionment of heavy metals in a soilâ€“water-plant system via brick kiln emissions in heavily industrialized city of Pakistan	2022	Environmental Science and Pollution Research	29	36	54855	54864
543	Fei L., Bilal M., Qamar S.A., Imran H.M., Riasat A., Jahangeer M., Ghafoor M., Ali N., Iqbal H.M.N.	Nano-remediation technologies for the sustainable mitigation of persistent organic pollutants	2022	Environmental Research	211			
544	Yamin M., bin Wan Ismail W.I., Abd Aziz S., bin Mohd Kassim M.S., Akbar F.N., Ibrahim M.	Design considerations of variable rate liquid fertilizer applicator for mature oil palm trees	2022	Precision Agriculture	23	4	1413	1448
545	Waqas H., Farooq U., Hussain M., Alanazi A.K., Brahmia A., Hammouch Z., Abo-Dief H.M., Safaei M.R.	Cattaneo-Christov heat and mass flux effect on upper-convected Maxwell nanofluid with gyrotactic motile microorganisms over a porous sheet	2022	Sustainable Energy Technologies and Assessments	52			

546	Jabeen F., Adrees M., Ibrahim M., Mahmood A., Khalid S., Sipra H.F.K., Bokhari A., Mubashir M., Khoo K.S., Show P.L.	Trash to Energy: A Measure for the Energy Potential of Combustible content of Domestic solid waste generated from an industrialized city of Pakistan	2022	Journal of the Taiwan Institute of Chemical Engineers	137			
547	Ahmed N., Shahzad Asif H.M., Bhatti A.R., Khan A.	Deep ensembling for perceptual image quality assessment	2022	Soft Computing	26	16	7601	7622
548	Fayyaz A., Zahoor M.K., Ashraf A., Zahoor M.A., Rasul A., Majeed H.N., Zulhusnain M., Ranian K., Riaz B., Khalil N., Attaullah	House Fly, <i>Musca domestica</i> (Diptera: Muscidae) Acts as a Mechanical Vector for Newcastle Disease of Poultry in Faisalabad, Pakistan	2022	Pakistan Journal of Zoology	54	4	1943	1946
549	Iqbal Z., Abbas F., Mahmood A., Ibrahim M., Gul M., Yamin M., Aslam B., Imtiaz M., Elahi N.N., Qureshi T.I., Sial G.Z.H.	Human health risk of heavy metal contamination in groundwater and source apportionment	2022	International Journal of Environmental Science and Technology	19	8	7251	7260
550	Ghani M.U., Asghar H.N., Nadeem H., Shahid M., Zeshan M.A., Niaz A., Hussain S., Hussain S.	Processes governing the environmental fates of alachlor in soil and aqueous media: a critical review	2022	International Journal of Environmental Science and Technology	19	8	8043	8060

551	Noureldin M., Ren C., Zaheer A., Ateya A., Khan K.U.	A comprehensive study on strengthening IPR Paradigm affecting regional development based on “One Belt One Road” collaboration between China and the Middle East	2022	Journal of Public Affairs	22	3		
552	Naqqash T., Malik K.A., Imran A., Hameed S., Shahid M., Hanif M.K., Majeed A., Iqbal M.J., Qaisrani M.M., van Elsas J.D.	Inoculation With Azospirillum spp. Acts as the Liming Source for Improving Growth and Nitrogen Use Efficiency of Potato	2022	Frontiers in Plant Science	13			
553	Zulfiqar M., Huo W., Wu S., Chen S., Elahi E., Yousaf M.U.	Behavioural Psychology of Unique Family Firms Toward R&D Investment in the Digital Era: The Role of Ownership Discrepancy	2022	Frontiers in Psychology	13			
554	Bashir A., Asif M., Saadullah M., Saleem M., Khalid S.H., Hussain L., Ullah Khan I., Sidra Yaseen H., Zubair H.M., Shamas M.U., Al Zarzour R., Chohan T.A.	Therapeutic Potential of Standardized Extract of Melilotus indicus (L.) All. and Its Phytochemicals against Skin Cancer in Animal Model: In Vitro, In Vivo, and In Silico Studies	2022	ACS Omega	7	29	25772	25782
555	Rehman S.U., Bresciani S., Ashfaq K., Alam G.M.	Intellectual capital, knowledge management and competitive advantage: a resource orchestration perspective	2022	Journal of Knowledge Management	26	7	1705	1731

556	Ali A., Manzoor M.F., Ahmad N., Aadil R.M., Qin H., Siddique R., Riaz S., Ahmad A., Korma S.A., Khalid W., Aizhong L.	The Burden of Cancer, Government Strategic Policies, and Challenges in Pakistan: A Comprehensive Review	2022	Frontiers in Nutrition	9			
557	Samar J., Butt G.Y., Shah A.A., Shah A.N., Ali S., Jan B.L., Abdelsalam N.R., Hussaan M.	Phycochemical and Biological Activities From Different Extracts of <i>Padina antillarum</i> (KÃ¼tz) Piccone	2022	Frontiers in Plant Science	13			
558	Abid H.M.U., Hanif M., Mahmood K., Aziz M., Abbas G., Latif H.	Wound-Healing and Antibacterial Activity of the Quercetin-4-Formyl Phenyl Boronic Acid Complex against Bacterial Pathogens of Diabetic Foot Ulcer	2022	ACS Omega	7	28	24415	24422
559	Manzoor M.F., Hussain A., Naumovski N., Ranjha M.M.A.N., Ahmad N., Karrar E., Xu B., Ibrahim S.A.	A Narrative Review of Recent Advances in Rapid Assessment of Anthocyanins in Agricultural and Food Products	2022	Frontiers in Nutrition	9			
560	Sattar T., Ullah M.I., Ahmad B.	The Role of Stakeholders Participation, Goal Directness and Learning Context in Determining Student Academic Performance: Student Engagement as a Mediator	2022	Frontiers in Psychology	13			

561	Zeng L.-H., Rana S., Hussain L., Asif M., Mehmood M.H., Imran I., Younas A., Mahdy A., Al-Joufi F.A., Abed S.N.	Polycystic Ovary Syndrome: A Disorder of Reproductive Age, Its Pathogenesis, and a Discussion on the Emerging Role of Herbal Remedies	2022	Frontiers in Pharmacology	13			
562	Imran M., Natasha, Murtaza B., Ansar S., Shah N.S., Haq Khan Z.U., Ali S., Boczkaj G., Hafeez F., Ali S., Rizwan M.	Potential of nanocomposites of zero valent copper and magnetite with Eleocharis dulcis biochar for packed column and batch scale removal of Congo red dye	2022	Environmental Pollution	305			
563	Iqbal M., Muneer M., Raza R., Jamal M.A.	Preparation of composite cathode material by using the extracted lead (Pb) of waste lead acid battery for LT-SOFC	2022	Ceramics International	48	14	19681	19687
564	Islam S., Hosen M.A., Ahmad S., ul Qamar M.T., Dey S., Hasan I., Fujii Y., Ozeki Y., Kawsar S.M.A.	Synthesis, antimicrobial, anticancer activities, PASS prediction, molecular docking, molecular dynamics and pharmacokinetic studies of designed methyl $\beta$ -D-glucopyranoside esters	2022	Journal of Molecular Structure	1260			
565	Jini D., Ahmad A., Aravind M., Ajitha S., Parvathiraja C., Tahani Mazyad A., Abdulsattar Mahmoud K., Ali S.	Evaluation of congo red dye doped magnesium sulphate crystal and their structural, optical, morphological, electrical and biological activities	2022	Journal of Molecular Structure	1260			

566	Raees M., Kashuri A., Awan M.U., Anwar M.	Some new post-quantum integral inequalities involving multi-parameter and their applications	2022	Mathematical Methods in the Applied Sciences	45	10	5965	5987
567	Chopra H., Bibi S., Goyal R., Gautam R.K., Trivedi R., Upadhyay T.K., Mujahid M.H., Shah M.A., Haris M., Khot K.B., Gopan G., Singh I., Kim J.K., Jose J., Abdel-Daim M.M., Alhumaydhi F.A., Emran T.B., Kim B.	Chemopreventive Potential of Dietary Nanonutraceuticals for Prostate Cancer: An Extensive Review	2022	Frontiers in Oncology	12			
568	Ullah F., Ali Khan M.F., Khan N.H., Rehman M.F., Shah S.S., Mustaqueem M., Ullah S., Zhang Q., Shi H.	Simvastatin-Loaded Lipid Emulsion Nanoparticles: Characterizations and Applications	2022	ACS Omega	7	27	23643	23652
569	Safeer A.A., Zhou Y., Abrar M., Luo F.	Consumer Perceptions of Brand Localness and Globalness in Emerging Markets: A Cross-Cultural Context	2022	Frontiers in Psychology	13			
570	Manzoor N., Ali L., Ahmed T., Noman M., Adrees M., Shahid M.S., Ogunyemi S.O., Radwan K.S.A., Wang G., Zaki H.E.M.	Recent Advancements and Development in Nano-Enabled Agriculture for Improving Abiotic Stress Tolerance in Plants	2022	Frontiers in Plant Science	13			

571	Meksi A., Youzera H., Sadoun M., Abbache A., Meftah S.A., Tounsi A., Hussain M.	The effect of transverse shear deformation on the post-buckling behavior of functionally graded beams	2022	Steel and Composite Structures	44	1	81	89
572	Youzera H., Ali A., Meftah S.A., Tounsi A., Hussain M.	Nonlinear damping and forced vibration analysis of laminated composite plates with composite viscoelastic core layer	2022	Steel and Composite Structures	44	1	91	104
573	Safeer A.A., Chen Y., Abrar M., Kumar N., Razzaq A.	Impact of perceived brand localness and globalness on brand authenticity to predict brand attitude: a cross-cultural Asian perspective	2022	Asia Pacific Journal of Marketing and Logistics	34	7	1524	1543
574	Shah A.A., Shah A.N., Bilal Tahir M., Abbas A., Javad S., Ali S., Rizwan M., Alotaibi S.S., Kalaji H.M., Telesinski A., Javed T., AbdElgawad H.	Harzianopyridone Supplementation Reduced Chromium Uptake and Enhanced Activity of Antioxidant Enzymes in Vigna radiata Seedlings Exposed to Chromium Toxicity	2022	Frontiers in Plant Science	13			
575	Khan A.H., Dehghani M.H., Khan N.A., Ali S.S., Akram M., Roy S., Alam S.S.	Modern Diagnostics Processes among New Strains of Coronaviruses: A Review	2022	Journal of Datta Meghe Institute of Medical Sciences University	17	3	772	778
576	Hussain M., Sharif H., Khadimallah M.A., Ayed H., Banoqitah E.M., Loukil H., Ali I.,	Use of rotating disk for Darcy-Forchheimer flow of nanofluid; Similarity transformation through porous media	2022	Computers and Concrete	30	1	1	8

	Mahmoud S.R., Tounsi A.							
577	Mahmood S., Knerr B., Khan I.A., Shabbir M., Mahmood R.	A Gender-Sensitive Analysis of Social Integration Challenges. Evidence from the Pakistani Diaspora in Germany	2022	Migration Letters	19	4	437	448
578	Ambreen Z., Faran S.A., Daniel A., Khalid S.H., Khan I.U., Asif M., Rehman A., Mehmood H.Q., Asghar S.	Physicochemical, rheological and antifungal evaluation of miconazole nitrate organogels for topical delivery	2022	Pakistan Journal of Pharmaceutical Sciences	35	4	1215	1221
579	Boota M., Shah S.M.A., Rashid A., Akram M., Ayaz S., Mustafa I., Nisar J., Nisar Z.	The Hepatoprotective and Anti-Nephrotoxic Potential of Methanolic Extract of a Polyherbal Preparation in CCl4-Induced Liver Injury Model of Wistar Rats	2022	Dose-Response	20	3		
580	Shaukat A., Hussain G., Irfan S., Ijaz M.U., Anwar H.	Therapeutic Potential of MgO and MnO Nanoparticles Within the Context of Thyroid Profile and Pancreatic Histology in a Diabetic Rat Model	2022	Dose-Response	20	3		

581	Abbas A., Anwar F., Alqahtani S.M., Ahmad N., Al-Mijalli S.H., Shahid M., Iqbal M.	Hydro-Distilled and Supercritical Fluid Extraction of <i>Eucalyptus camaldulensis</i> Essential Oil: Characterization of Bioactives Along With Antioxidant, Antimicrobial and Antibiofilm Activities	2022	Dose-Response	20	3		
582	Akhtar M., Hussain G., Yusuf M., Amin N., Arshad M.I.	Synthesis and characterizations of Mg-Cu-Co-Dy ferrites and their composites with graphene nanoplatelets (GNP)	2022	Journal of Ovonic Research	18	4	539	551
583	Saadullah M., Arif S., Hussain L., Asif M., Khurshid U.	Dose Dependent Effects of <i>Breynia cernua</i> Against the Paraquat Induced Parkinsonism like Symptoms in Animals™ Model: In Vitro, In Vivo and Mechanistic Studies	2022	Dose-Response	20	3		
584	Gul H., Jamshed A., Jabeen Q.	Pharmacological Investigation of <i>Asphodelus tenuifolius</i> Cav. for its Potential Against Thrombosis in Experimental Models	2022	Dose-Response	20	3		
585	Jaan A., Iqbal W., Shahzad B., Iqbal Y., Rehman M.U., Haider I., Javid M.T., Anwar U.	Visible light photocatalyticdye degradation activity of Fe3+, Co2+, Mn2+ and Zn2+mononuclear complexes derived from O-vanillin bidentate schiffbase ligands	2022	Digest Journal of Nanomaterials and Biostructures	17	3	913	920

586	Ullah A., Toufiq A.M., Qureshi M.T., Khan A., Younas M., Obeidat S.T., Al Elaimi M., Hameed R.A., Ullah F.	Hydrothermal synthesis, characterization and antimicrobial activity of Ag-modified ZnO nanoplates against pathogen	2022	Digest Journal of Nanomaterials and Biostructures	17	3	949	960
587	Naz F., Nawaz T., Abid M., Pang T.	A novel improved class of ratio-product type exponential estimators of population variance	2022	Scientia Iranica	29	4	2115	2133
588	Miran S., Tamoor M., Kiren T., Raza F., Hussain M.I., Kim J.-T.	Optimization of Standalone Photovoltaic Drip Irrigation System: A Simulation Study	2022	Sustainability (Switzerland)	14	14		
589	Yasmin R., Zafar M.S., Tahir I.M., Asif R., Asghar S., Raza S.K.	Biosorptive Potential of Pseudomonas species RY12 Toward Zinc Heavy Metal in Agriculture Soil Irrigated with Contaminated Waste Water	2022	Dose-Response	20	3		
590	Munir N., Mahmood Z., Shahid M., Aslam S., Abbas M., Mehboob H., Al-Mijallia S.H., Jahangeer M., Badar Q.U.A.	Phytochemical Constituents and In vitro Pharmacological Response of Cnidium monnieri; A Natural Ancient Medicinal Herb	2022	Dose-Response	20	3		
591	Munir M.U., Ikraam M., Nadeem M., Khalid S.H., Asghar S., Khalid I., Irfan M., Islam N., Ajaz N., Khan I.U.	Fabrication, In Vitro and In Vivo Evaluation of Non-Ordered Mesoporous Silica-Based Ternary Solid Dispersions for Enhanced Solubility of Flurbiprofen	2022	Pharmaceuticals	15	7		

592	Latif Z., Rehman A.U., Yusuf M., Amin N., Arshad M.I.	Estimation of the spectral, electrical, and dielectric properties of Mn-Cu-Cd-Gd ferrite\graphene nanoplatelets composites	2022	Journal of Ovonic Research	18	4	627	635
593	Hussain A., Khan N.U., Ullah M., Imran M., Ibrahim M., Hussain J., Ullah H., Ullah I., Ahmad I., Khan M.U., Ali M., Attique F.	Brick Kilns Air Pollution and its Impact on the Peshawar City	2022	Pollution	8	4	1266	1273
594	Hussain M., Hussain M.	Controlling of ring based structure of rotating FG shell: Frequency distribution	2022	Advances in Concrete Construction	14	1	35	43
595	Akbar M., Hussain A., Sokolova M., Sabahat T.	Financial Distress, Firm Life Cycle, and Corporate Restructuring Decisions: Evidence from Pakistanâ€™s Economy	2022	Economies	10	7		
596	Rida T., Ahmad S., Ullah A., Ismail S., Tahir ul Qamar M., Afsheen Z., Khurram M., Saqib Ishaq M., Alkhathami A.G., Alatawi E.A., Alrumaihi F., Allemailem K.S.	Pan-Genome Analysis of Oral Bacterial Pathogens to Predict a Potential Novel Multi-Epitopes Vaccine Candidate	2022	International Journal of Environmental Research and Public Health	19	14		

	Karthika C., Najda A., Klepacka J., Zehravi M., Akter R., Akhtar M.F., Saleem A., Al-Shaeri M., Mondal B., Ashraf G.M., Tagde P., Ramproshad S., Ahmad Z., Khan F.S., Rahman M.H.	Involvement of Resveratrol against Brain Cancer: A Combination Strategy with a Pharmaceutical Approach	2022	Molecules	27	14		
597	Khan N.H., Hassan S., Bahader S., Fatima S., Zaidi S.M.I.H., Virk R., Jiang K., Jiang E.	How Daily Obstacles Affect Frontline Healthcare Professionalsâ€™ Mental Health during Omicron: A Daily Diary Study of Handwashing Behavior	2022	International Journal of Environmental Research and Public Health	19	14		
598	Asghar A., Aamir M.N., Sheikh F.A., Ahmad N., Elsherif M.A., Abbas Bukhari S.N.	Co-Combination of Pregabalin and Withania coagulans-Extract-Loaded Topical Gel Alleviates Allodynia and Hyperalgesia in the Chronic Sciatic Nerve Constriction Injury for Neuropathic Pain in Animal Model	2022	Molecules	27	14		
599	Bashir S., Arshad M.S., Khalid W., Nayik G.A., Al Obaid S., Ansari M.J., Moreno A., Karabagias I.K.	Effect of Antimicrobial and Antioxidant Rich Pomegranate Peel Based Edible Coatings on Quality and Functional Properties of Chicken Nuggets	2022	Molecules	27	14		
600	Alam T.M., Shaukat K., Mahboob H., Sarwar M.U., Iqbal F., Nasir A.,	A Machine Learning Approach for Identification of Malignant Mesothelioma Etiological Factors in an Imbalanced Dataset	2022	Computer Journal	65	7	1740	1751

	Hameed I.A., Luo S.							
602	Rasool G., Riaz M., Abbas M., Fatima H., Qamar M.M., Zafar F., Mahmood Z.	COVID-19: Clinical laboratory diagnosis and monitoring of novel coronavirus infected patients using molecular, serological and biochemical markers: A review	2022	International Journal of Immunopathology and Pharmacology	36			
603	Siddiq A., Zubair M., Bilal M., Rasool N., Qamar M.U., Khalid A., Ahmad G., Imran M., Mahmood S., Ashraf G.A.	Synthesis of Functionalized N-(4-Bromophenyl)furan-2-carboxamides via Suzuki-Miyaura Cross-Coupling: AntiBacterial Activities against Clinically Isolated Drug Resistant <i>A. baumannii</i> , <i>K. pneumoniae</i> , <i>E. cloacae</i> and MRSA and Its Validation via a Computational Approach	2022	Pharmaceuticals	15	7		
604	Dradrach A., Iqbal M., LewiÅ„ska K., JÄ™droszka N., Gull-E-faran, Rana M.A.K., Tanzeem-Ul-haq H.S.	Effects of Soil Application of Chitosan and Foliar Melatonin on Growth, Photosynthesis, and Heavy Metals Accumulation in Wheat Growing on Wastewater Polluted Soil	2022	Sustainability (Switzerland)	14	14		
605	Arshad N., Zia K.M., Hussain M.T., Arshad M.M., Zuber M.	Synthesis and Characterization of Aqueous Curcumin Polyurethane Dispersions Using Isophorone Diisocyanate: Efficiency Evaluation as Textile Finishes	2022	Fibers and Polymers	23	7	1894	1905

606	Javed A., Muzammal A., Akash M.S.H., Rehman K.	Biochemical Investigation of Therapeutic Potentials of Plant-Based Bioactive Compounds as Stimulators of Glucagon like peptide-1 Secretion	2022	Dose-Response	20	3		
607	Raza M., Riaz A., Xin Q., Malik S.N.	Hankel Determinants and Coefficient Estimates for Starlike Functions Related to Symmetric Booth Lemniscate	2022	Symmetry	14	7		
608	Sarwar S., Javed M.Y., Jaffery M.H., Ashraf M.S., Naveed M.T., Hafeez M.A.	Modular Level Power Electronics (MLPE) Based Distributed PV System for Partial Shaded Conditions	2022	Energies	15	13		
609	Asghar A., Aamir M.N., Sheikh F.A., Ahmad N., Alotaibi N.F., Bukhari S.N.A.	Preparation, Characterization of Pregabalin and Withania coagulans Extract-Loaded Topical Gel, and Their Comparative Effect on Burn Injury	2022	Gels	8	7		
610	Mubarik A., Mahmood S., Rasool N., Hashmi M.A., Ammar M., Mutahir S., Ali K.G., Bilal M., Akhtar M.N., Ashraf G.A.	Computational Study of Benzothiazole Derivatives for Conformational, Thermodynamic and Spectroscopic Features and Their Potential to Act as Antibacterials	2022	Crystals	12	7		

611	Farid M., Abubakar M., Asam Z.U.Z., Sarfraz W., Abbas M., Shakoor M.B., Ali S., Ahmad S.R., Jilani A., Iqbal J., Al-Sehemi A.G., Al-Hartomy O.A.	Microwave Irradiation and Glutamic Acid-Assisted Phytotreatment of Tannery and Surgical Industrial Wastewater by Sorghum	2022	Molecules	27	13		
612	Rashid M.H., Koel A., Rang T., Nasir N., Sabir N., Ameen F., Rasheed A.	Optical Dynamics of Copper-Doped Cadmium Sulfide (CdS) and Zinc Sulfide (ZnS) Quantum-Dots Core/Shell Nanocrystals	2022	Nanomaterials	12	13		
613	Alshammari A., Alharbi M., Alghamdi A., Alharbi S.A., Ashfaq U.A., Ul Qamar M.T., Ullah A., Irfan M., Khan A., Ahmad S.	Computer-Aided Multi-Epitope Vaccine Design against Enterobacter xiangfangensis	2022	International Journal of Environmental Research and Public Health	19	13		
614	Rashid S., Kanwal B., Jarad F., Elagan S.K.	A peculiar application of the fractalâ€“fractional derivative in the dynamics of a nonlinear scabies model	2022	Results in Physics	38			
615	Sohail A., Ahmed R., Zainab R., Yu C.s.	Enhanced entanglement and quantum steering of directly and indirectly coupled modes in a magnomechanical system	2022	Physica Scripta	97	7		
616	Nazeer M., Al-Zubaidi A., Hussain F., Duraihem F.Z., Anila S., Saleem S.	Thermal transport of two-phase physiological flow of non-Newtonian fluid through an inclined channel with flexible walls	2022	Case Studies in Thermal Engineering	35			

617	Arshad M.S., Qaiser M., Mahmood K., Shoib M.H., Ameer N., Ramzan N., Hanif M., Abbas G.	Chitosan/halloysite nanotubes microcomposites: A double header approach for sustained release of ciprofloxacin and its hemostatic effects	2022	International Journal of Biological Macromolecules	212		314	323
618	Tahir S., Ashfaq A., Sani G.-R., Sebastian Bonilla R., ur Rehman U., Mushtaq S., Ahmad W., Muhammad Khan K., Haneef M., Saeed R.	Enhanced thermoelectric performance of n-type MgZnO enabled via synergy of chemical bonding and grain boundaries modulation	2022	Inorganic Chemistry Communications	141			
619	Iftikhar N., Chatha S.A.S., Ahmad T., Ali Q., Hussain A.I., Rathore H.A.	Fagonia arabica L.: A Review of its Phytochemistry, Pharmacology and Traditional Uses	2022	Combinatorial Chemistry and High Throughput Screening	25	7	1187	1199
620	Mahmood I., Raza A., Maqbool H.F., Dehghani-Sanj A.A.	Evaluation of an ankle-foot orthosis effect on gait transitional stability during ramp ascent/descent	2022	Medical and Biological Engineering and Computing	60	7	2119	2132
621	Mushtaq S., Tahir S.A., Ashfaq A., Ahmad W., Baig A., Rehman U.U., Saeed R., Haneef M., shabbir K., Khan K.M.	Effect of ammonia on the structural, morphological and optical properties of nanocrystalline ZnS thin film	2022	Optik	261			
622	Hussain A., Nadeem M., Gulzar N., Imran M.	Fatty acids profile, antioxidant properties, phytosterols, induction period, and sensory characteristics of olein and super olein fractions of date seed oil	2022	Journal of Food Processing and Preservation	46	7		

623	Zhang S., Qamar S.A., Junaid M., Munir B., Badar Q., Bilal M.	Algal Polysaccharides-Based Nanoparticles for Targeted Drug Delivery Applications	2022	Starch/Staerke	74	45481		
624	Sarfraz I., Rasul A., Hussain G., Shah M., Nageen B., Jabeen F., SelamoÄŸlu Z., UÄŸak Ä°., Asrar M., Adem S.	A Review on Phyto-pharmacology of Oxalis corniculata	2022	Combinatorial Chemistry and High Throughput Screening	25	7	1181	1186
625	Rahman M.M., Islam M.R., Shohag S., Hossain M.E., Shah M., shuvo S., Khan H., Chowdhury M.A.R., Bulbul I.J., Hossain M.S., Sultana S., Ahmed M., Akhtar M.F., Saleem A., Rahman M.H.	Multifaceted role of natural sources for COVID-19 pandemic as marine drugs	2022	Environmental Science and Pollution Research	29	31	46527	46550
626	Abbas M.S., Saeed F., Afzaal M., Jianfeng L., Hussain M., Ikram A., Jabeen A.	Recent trends in encapsulation of probiotics in dairy and beverage: A review	2022	Journal of Food Processing and Preservation	46	7		
627	Maryam, Shah S.Z.H., Fatima M., Hussain S., Nadeem H., Hussain M.	The effectiveness of protease supplemented poultry by-product meal-based diet on growth, nutrient digestibility and digestive enzyme activities of rohu ( <i>Labeo rohita</i> )	2022	Aquaculture Research	53	10	3841	3852

628	Kabir M.T., Ferdous Mitu J., Akter R., Akhtar M.F., Saleem A., Al-Harrasi A., Bhatia S., Rahman M.S., Damiri F., Berrada M., Rahman M.H.	Therapeutic potential of dopamine agonists in the treatment of type 2 diabetes mellitus	2022	Environmental Science and Pollution Research	29	31	46385	46404
629	Iqbal S., Kiran S., Perveen S., Malik R., Taha M., Khan K.M., Perveen S., Choudhary M.I.	Synthesis and Evaluation of Bis-schiff Bases of Carbohydrazide as Anti-oxidant and Cytotoxic Agents	2022	Medicinal Chemistry	18	6	667	678
630	Saleem S., Tourigny L., Raziq M.M., Shaheen S., Goher A.	Servant leadership and performance of public hospitals: Trust in the leader and psychological empowerment of nurses	2022	Journal of Nursing Management	30	5	1206	1214
631	Zubair M., Azeem M., Mumtaz R., Younas M., Adrees M., Zubair E., Khalid A., Hafeez F., Rizwan M., Ali S.	Green synthesis and characterization of silver nanoparticles from Acacia nilotica and their anticancer, antidiabetic and antioxidant efficacy	2022	Environmental Pollution	304			
632	Ashfaq A., Tahir S., Rehman U.U., Ali A., Mehmood K., Ashfaq F., Ahmad W., Khan K.M., Haneef M., Mushtaq H.M.S., Amin N., Saeed R., shabbir K.	Enhanced thermoelectric properties of 2Hâ€“MoS <sub>2</sub> thin film by tuning post sulfurization temperature	2022	Ceramics International	48	13	18944	18948

633	Afzaal M., Saeed F., Hussain M., Shahid F., Siddeeg A., Al-Farga A.	Proteomics as a promising biomarker in food authentication, quality and safety: A review	2022	Food Science and Nutrition	10	7	2333	2346
634	Chen F., Bashir A., Zia ur Rehman M., Adrees M., Qayyum M.F., Ma J., Rizwan M., Ali S.	Combined effects of green manure and zinc oxide nanoparticles on cadmium uptake by wheat ( <i>Triticum aestivum L.</i> )	2022	Chemosphere	298			
635	Iqbal M.N., Bhatti A.R., Butt A.D., Sheikh Y.A., Paracha K.N., Ashique R.H.	Solution of Economic Dispatch Problem Using Hybrid Multi-Verse Optimizer	2022	Electric Power Systems Research	208			
636	Afzaal A., Rehman K., Kamal S., Akash M.S.H.	Versatile role of sirtuins in metabolic disorders: From modulation of mitochondrial function to therapeutic interventions	2022	Journal of Biochemical and Molecular Toxicology	36	7		
637	Korkut Pata U., Yilanci V., Hussain B., Asif Ali Naqvi S.	Analyzing the role of income inequality and political stability in environmental degradation: Evidence from South Asia	2022	Gondwana Research	107		13	29
638	Khan M.T.I., Anwar S., Batool Z.	The role of infrastructure, socio-economic development, and food security to mitigate the loss of natural disasters	2022	Environmental Science and Pollution Research	29	35	52412	52437

639	Tamoor M., Abu Bakar Tahir M., Zaka M.A., Iqtidar E.	Photovoltaic distributed generation integrated electrical distribution system for development of sustainable energy using reliability assessment indices and levelized cost of electricity	2022	Environmental Progress and Sustainable Energy	41	4		
640	Ur Rehman H., Ahmed S., Ur Rahman M., Mehmood M.S.	Arsenic contamination, induced symptoms, and health risk assessment in groundwater of Lahore, Pakistan	2022	Environmental Science and Pollution Research	29	33	49796	49807
641	Nabgan W., Saeed M., Jalil A.A., Nabgan B., Gambo Y., Ali M.W., Ikram M., Fauzi A.A., Owgi A.H.K., Hussain I., Thahe A.A., Hu X., Hassan N.S., Sherryna A., Kadier A., Mohamud M.Y.	A state of the art review on electrochemical technique for the remediation of pharmaceuticals containing wastewater	2022	Environmental Research	210			
642	Li Y., Zhang C., Li S., Usman A.	Energy efficiency and green innovation and its asymmetric impact on CO2 emission in China: a new perspective	2022	Environmental Science and Pollution Research	29	31	47810	47817
643	Ghufran M., Ali S., Ariyesti F.R., Nawaz M.A., Aldieri L., Xiaobao P.	Impact of COVID-19 to customers switching intention in the food segments: The push, pull and mooring effects in consumer migration towards organic food	2022	Food Quality and Preference	99			

644	Khan A., Akram M., Thiruvengadam M., Daniyal M., Zakki S.A., Munir N., Zainab R., Heydari M., Mosavat S.H., Rebezov M., Shariati M.A.	Anti-anxiety Properties of Selected Medicinal Plants	2022	Current Pharmaceutical Biotechnology	23	8	1041	1060
645	Ain Q.T., Anjum N., Din A., Zeb A., Djilali S., Khan Z.A.	On the analysis of Caputo fractional order dynamics of Middle East Lungs Coronavirus (MERS-CoV) model	2022	Alexandria Engineering Journal	61	7	5123	5131
646	Babur E., DindaroÄŸlu T., Riaz M., Uslu O.S.	Seasonal Variations in Litter Layersâ€™ Characteristics Control Microbial Respiration and Microbial Carbon Utilization Under Mature Pine, Cedar, and Beech Forest Stands in the Eastern Mediterranean Karstic Ecosystems	2022	Microbial Ecology	84	1	153	167
647	Ramzan N., Ranjha N.M., Hanif M., Bashir Z., Mahmood K., Rehman S., Latif H., Ameer N., Aziz M., Abbas G.	Interpenetrating network of gelatin/acrylamide: a binary approach for sustained release and anti-ulcerent effect of RNT	2022	Polymer Bulletin	79	7	5569	5585
648	Raees A., Jamal M.A., Ahmad A., Ahmad I., Saeed M., Habila M.A., AlMasoud N., Alomar	Synthesis and characterization of Ceria incorporated Nickel oxide nanocomposite for promising degradation of methylene blue via photocatalysis	2022	International Journal of Environmental Science and Technology	19	7	6445	6452

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649	Xiang K., Akram M., Elbossaty W.F., Yang J., Fan C.	Exosomes in atrial fibrillation: therapeutic potential and role as clinical biomarkers	2022	Heart Failure Reviews	27	4	1211	1221
650	Naseem Z., Hanif M.A., Zahid M., Tahir S., Anjum F., Bhatti H.N.	Ultrasound-assisted deep eutectic solvent-based extraction of phytochemicals from <i>Mentha arvensis</i> : optimization using Box-Behnken design	2022	Biomass Conversion and Biorefinery	12		35	45
651	Jabbar F., Abbas G., Ameer N., Akhtar M.F., Shah S., Hanif M.	Preparation and characterization of halloysite nanotubes containing hydrogels for controlled release drug delivery of cetirizine dihydrochloride	2022	Polymer Bulletin	79	7	5417	5435
652	Saud S., Wang D., Fahad S., Alharby H.F., Bamagoos A.A., Mjrashi A., Alabdallah N.M., AlZahrani S.S., AbdElgawad H., Adnan M., Sayyed R.Z., Ali S., Hassan S.	Comprehensive Impacts of Climate Change on Rice Production and Adaptive Strategies in China	2022	Frontiers in Microbiology	13			

653	Ghani U., Jiang W., Hina K., Idrees A., Iqbal M., Ibrahim M., Saeed R., Irshad M.K., Aslam I.	Adsorption of Methyl Orange and Cr (VI) Onto Poultry Manure-Derived Biochar From Aqueous Solution	2022	Frontiers in Environmental Science	10			
654	Djidar F.Z., Hebali H., Amara K., Tounsi A., Bendaho B., Ghazwani M.H., Hussain M.	Flexural and free vibration responses of thick isotropic bridge deck using a novel two variable refined plate theory	2022	Structural Engineering and Mechanics	82	6	725	734
655	Ghazanfar S., Abdullah M., Ummar R., Shabbir R., Saqib S.	Effect of Sustainability Claim on Willingness to Pay for Upcycled Food in Digital Era: Differential Effect of Sustainability Claim Between Virtue and Vice Product Category	2022	Frontiers in Environmental Science	10			
656	Chaman S., Shaheen S., Hussain A.	Linking Leaderâ€™s Behavioral Integrity With Workplace Ostracism: A Mediated-Moderated Model	2022	Frontiers in Psychology	13			
657	Amin M., Tahir F., Ashfaq H., Akbar I., Razzaque N., Haider M.N., Xu J., Zhu H., Wang N., Shahid A.	Decontamination of industrial wastewater using microalgae integrated with biotransformation of the biomass to green products	2022	Energy Nexus	6			
658	Pan Y.-H., Chen L., Guo H.-F., Feng R., Lou Q.-J., Rashid M.A.R., Zhu X.-Y., Qing D.-J., Liang H.-F., Gao L.-J., Huang C.-C.,	Systematic Analysis of NB-ARC Gene Family in Rice and Functional Characterization of GNP12	2022	Frontiers in Genetics	13			

	Zhao Y., Deng G.-F.							
659	Adeel S., Abbas S., Habib N., Ticha M.B., Batool F., Mia R.	Innovative isolation of colorant from <i>Butea monosperma</i> for surface-modified silk dyeing	2022	Surface Innovations	11	5	313	325
660	Liu H.-Y., Liu Y., Li M.-Y., Mai Y.-H., Guo H., Wadood S.A., Raza A., Wang Y., Zhang J.-Y., Li H.-B., Gan R.-Y.	The chemical, sensory, and volatile characteristics of instant sweet tea ( <i>Lithocarpus litseifolius</i> [Hance] Chun) using electronic nose and GC-MS-based metabolomics analysis	2022	LWT	163			
661	Rasul M.N., Mehmood M., Hussain A., Rafiq M.A., Manzoor A., Iqbal F., Khan M.A.	Structural, electronic, elastic, mechanical, magnetic and thermophysical insights of $X\text{CNi}_3$ ( $X = \text{Sc}, \text{Ti}, \text{V}, \text{Cr}, \text{Mn}, \text{Fe}, \text{Co}$ and $\text{Cu}$ ) novel anti-perovskites	2022	Materials Science in Semiconductor Processing	144			
662	Aslam S., Ali H.S., Ahmad M., Mansha A., Ali N., Khan S., Naqvi S.A.R., Khalid Z., Asim S., Parvez M., Khalid M.	A combined experimental and theoretical study of alkyl 2-(3-benzoyl-4-hydroxy-1,1-dioxido-2H-benzo[e][1,2]thiazin-2-yl)acetates: Synthesis, X-ray crystallography and DFT	2022	Journal of Molecular Structure	1258			
663	Farooq U., Waqas H., Muhammad T., Imran M., Alshomrani A.S.	Computation of nonlinear thermal radiation in magnetized nanofluid flow with entropy generation	2022	Applied Mathematics and Computation	423			

664	Khalid H., Kashif Zahoor M., Riaz D., Arshad M., Yaqoob R., Ranian K.	Sewage Sludge-Induced Effect on Growth, Enzyme Inhibition, and Genotoxicity can be Ameliorated Using Wheat Straw and Biochar in <i>Pheretima posthuma</i> Earthworms	2022	Frontiers in Environmental Science	10			
665	Jiang B., Kumar T., Rehman N., Hameed R., Kiziloglu M., Israr A.	Role of Psychological Contracts in Enhancing Employee Creativity Through Knowledge Sharing: Do Boundary Conditions of Organization's Socialization and Work-Related Curiosity Matter?	2022	Frontiers in Psychology	13			
666	Anwar S., Wahla A.Q., Ali T., Khaliq S., Imran A., Tawab A., Afzal M., Iqbal S.	Biodegradation and Subsequent Toxicity Reduction of Co-contaminants Tribenuron Methyl and Metsulfuron Methyl by a Bacterial Consortium B2R	2022	ACS Omega	7	23	19816	19827
667	Sun J., Safdar H., Jaffri Z.U.A., Ibn-ul-Hassan S., Ozturk I.	Substantiating Nexus Between Consumption Values and Sustainable Consumption Behavior: A Way Toward Sustainable Business	2022	Frontiers in Psychology	13			
668	Zameer R., Fatima K., Azeem F., ALgwaiiz H.I.M., Sadaqat M., Rasheed A., Batool R., Shah A.N., Zaynab M., Shah A.A., Attia K.A., AlKahtani M.D.F., Fiaz S.	Genome-Wide Characterization of Superoxide Dismutase (SOD) Genes in <i>Daucus carota</i> : Novel Insights Into Structure, Expression, and Binding Interaction With Hydrogen Peroxide (H <sub>2</sub> O <sub>2</sub> ) Under Abiotic Stress Condition	2022	Frontiers in Plant Science	13			

669	Xu J.-R., Mehmood M.A., Wang L., Ahmad N., Ma H.-J.	OMICs-Based Strategies to Explore Stress Tolerance Mechanisms of <i>Saccharomyces cerevisiae</i> for Efficient Fuel Ethanol Production	2022	Frontiers in Energy Research	10			
670	Massud A., Syed Sulaiman S.A., Ahmad N., Shafqat M., Chiau Ming L., Khan A.H.	Frequency and Management of Adverse Drug Reactions Among Drug-Resistant Tuberculosis Patients: Analysis From a Prospective Study	2022	Frontiers in Pharmacology	13			
671	Yadegar M., Kohanmoo M.A., Sohrabi F., Khademi R., Anjum F.	Fruit physicochemical properties of several cultivars of date palm and their influence on the susceptibility to <i>Oligonychus afrasiaticus</i> (Acari: Tetranichyidae) in the southern of Iran	2022	Journal of Entomological Society of Iran	42	1	15	27
672	Hafeez F., Zahoor A.F., Irfan M., Kamal S., Ahmad S.	Facile One-Pot Approach to the Synthesis of Alkyl Piperazine-1-carbodithioates as Hemolytic and Thrombolytic Agents	2022	Russian Journal of Organic Chemistry	58	6	884	890
673	Manzoor U., Naqvi S.M.R.S., Muhammad T., Naeem H., Waqas H., Galal A.M.	Hydro-magnetic impact on the nanofluid flow over stretching/shrinking sheet using Keller-box method	2022	International Communications in Heat and Mass Transfer	135			
674	Batool S., Javed M.R., Aslam S., Noor F., Javed H.M.F., Seemab R., Rehman A., Aslam M.F., Paray B.A., Gulnaz A.	Network Pharmacology and Bioinformatics Approach Reveals the Multi-Target Pharmacological Mechanism of <i>Fumaria indica</i> in the Treatment of Liver Cancer	2022	Pharmaceuticals	15	6		

675	Basit F., Nazir M.M., Shahid M., Abbas S., Javed M.T., Naqqash T., Liu Y., Yajing G.	Application of zinc oxide nanoparticles immobilizes the chromium uptake in rice plants by regulating the physiological, biochemical and cellular attributes	2022	Physiology and Molecular Biology of Plants	28	6	1175	1190
676	Shah P.A., Syed H.K., Sohail A.R., Pervaiz A., Iqbal M.S., Liew K.B., Khan S.-U.-D., Zaidi H.A.	Comparison of solvent evaporation and ultrasonic-assisted production methods in the development of nimesulide nanosponges and their characterization	2022	Tropical Journal of Pharmaceutical Research	21	6	1139	1145
677	Rafique M.A., Kiran S., Ashraf A., Mukhtar N., Rizwan S., Ashraf M., Arshad M.Y.	Effective removal of Direct Orange 26 dye using copper nanoparticles synthesized from Tilapia fish scales	2022	Global Nest Journal	24	2	311	317
678	Hussain M.	Size dependent dynamic bending nonlocal response of armchair and chiral SWCNTs based on Flügge model	2022	Advances in Concrete Construction	13	6	451	459
679	Hussain M., Asghar S., Khadimallah M.A., Ayed H., Banoqitah E.M., Loukil H., Ali I., Mahmoud S.R., Tounsi A.	Elastic shell model: Effect of Young's Modulus on the vibration of double-walled CNTs	2022	Advances in Concrete Construction	13	6	471	479

680	Saleem N., Ashraf T., Daqqa I., Munawar S., Idrees N., Afzal F., Afzal D.	Thermal Case Study of Cilia Actuated Transport of Radiated Blood-Based Ternary Nanofluid under the Action of Tilted Magnetic Field	2022	Coatings	12	6		
681	Abbas M., Li Y., Elbaiomy R.G., Yan K., Ragauskas A.J., Yadav V., Soaud S.A., Islam Md.M., Saleem N., Noor Z., Zafar S., Hussain S.S., Abbas M., Abbas S., Li J., El-Sappah A.H.	Genome-Wide Analysis and Expression Profiling of SIHsp70 Gene Family in Solanum lycopersicum Revealed Higher Expression of SIHsp70-11 in Roots under Cd2+ Stress	2022	Frontiers in Bioscience - Landmark	27	6		
682	Bin-Mohsin B., Saba M., Javed M.Z., Awan M.U., Budak H., Nonlaopon K.	A Quantum Calculus View of Hermiteâ€“Hadamardâ€“Jensenâ€“Mercer Inequalities with Applications	2022	Symmetry	14	6		
683	Kaleem M., Shabir F., Hussain I., Hameed M., Ahmad M.S.A., Mehmood A., Ashfaq W., Riaz S., Afzaal Z., Maqsood M.F., Iqbal U., Shah S.M.R., Irshad M.	Alleviation of cadmium toxicity in Zea mays L. through up-regulation of growth, antioxidant defense system and organic osmolytes under calcium supplementation	2022	PLoS ONE	17	45449		
684	Iqbal N., Zahoor A.F., Rasool N., Khan S.G., Akhtar R., Ahmad R.	Synthetic Approaches to the Total Synthesis of Tubulysin and its Fragments: A Review	2022	Current Organic Synthesis	19	4	507	542

685	Shakir R., Hanif S., Salawi A., Arshad R., Sarfraz R.M., Irfan M., Raza S.A., Barkat K., Sabei F.Y., Almoshari Y., Alshamrani M., Syed M.A.	Exorbitant Drug Loading of Metformin and Sitagliptin in Mucoadhesive Buccal Tablet: In Vitro and In Vivo Characterization in Healthy Volunteers	2022	Pharmaceuticals	15	6		
686	Zafar I., Hussain A.I., Fatima T., Alnasser S.M.A., Ahmad A.	Inter-Varietal Variation in Phenolic Profile, Sugar Contents, Antioxidant, Anti-Proliferative and Antibacterial Activities of Selected Brassica Species	2022	Applied Sciences (Switzerland)	12	12		
687	Sohail A., Ahmed R., Shahzad A., Khan M.A.	Magnon-Phonon-Photon Entanglement via the Magnetoelastic Coupling in a Magnomechanical System	2022	International Journal of Theoretical Physics	61	6		
688	Virk Z.A., Al Farraj D.A., Iqbal M., LewiÅ„ska K., Hussain S.	Inoculation with the pH Lowering Plant Growth Promoting Bacterium Bacillus sp. ZV6 Enhances Ni Phytoextraction by Salix alba from a Ni-Polluted Soil Receiving Effluents from Ni Electroplating Industry	2022	Sustainability (Switzerland)	14	12		
689	Sohail A., Hassan A., Ahmed R., Yu C.-S.	Generation of enhanced entanglement of directly and indirectly coupled modes in a two-cavity magnomechanical system	2022	Quantum Information Processing	21	6		

690	Sarwar F., Rasool M.H., Khurshid M., Qamar M.U., Aslam B.	Escherichia coli Isolates Harboring blaNDM Variants and 16S Methylases Belonging to Clonal Complex 131 in Southern Punjab, Pakistan	2022	Microbial Drug Resistance	28	6	623	635
691	Arshad M., Rasool N., Qamar M.U., Shah S.A.A., Zakaria Z.A.	Facile Synthesis of Functionalized Phenoxy Quinolines: Antibacterial Activities against ESBL Producing Escherichia coli and MRSA, Docking Studies, and Structural Features Determination through Computational Approach	2022	Molecules	27	12		
692	Hussain M., Wang Z., Mo Y., Huang G., Kaousar R., Tan W.	Influence of Exogenous 28-Homobrassinolide Optimized Dosage and EDAH Application on Hormone Status, Grain Filling, and Maize Production	2022	Processes	10	6		
693	Sajid M.M., Zhai H., Alomayri T., Khan S.B., Javed Y., Shad N.A., Ishaq A.R., Amin N., Zhang Z.	Platinum doped bismuth vanadate (Pt/BiVO <sub>4</sub> ) for enhanced photocatalytic pollutant degradation using visible light irradiation	2022	Journal of Materials Science: Materials in Electronics	33	18	15116	15131
694	Hussain A., Kaisheng L., Noman A., Ashraf M.F., Albaqami M., Khan M.I., Liu Z., He S.	N-Methyltransferase CaASHH3 Acts as a Positive Regulator of Immunity against Bacterial Pathogens in Pepper	2022	International Journal of Molecular Sciences	23	12		

695	Zafar M.U., Ping Q., Khan S., Zafar M.U., Rauf R.	CONSUMPTION OF FUNCTIONAL FOOD AND KNOWLEDGE OF ITS ATTRIBUTES: A QUANTITATIVE STUDY OF CONSUMERS IN PUNJAB PROVINCE, PAKISTAN	2022	Journal of Animal and Plant Sciences	32	3	791	797
696	Habib D., Salamat N., Abdal S.H.S., Ali B.	Numerical investigation for MHD Prandtl nanofluid transportation due to a moving wedge: Keller box approach	2022	International Communications in Heat and Mass Transfer	135			
697	Ali A., Hussain M., Inc M., Hussan M., Rahman J.U.	Numerical solution and mathematical modelling of mass transport from medicated stent	2022	Physica Scripta	97	6		
698	Boubakeur B., Drabo M.S., Khadem H., Segda R., Shah M.A., Savadogo A.	ANTIMICROBIAL, ANTIBIOFILM, AND PROBIOFILM EFFECTS OF GALLIC ACID ON EXOPOLYSACCHARIDE-DEPENDENT AND -INDEPENDENT BIOFILM OF MODEL STRAINS STREPTOCOCCUS THERMOPHILUS CNRZ 447 AND STAPHYLOCOCCUS AUREUS ATCC 43300	2022	Journal of Microbiology, Biotechnology and Food Sciences	11	6		
699	Alamri M.A., Mirza M.U., Adeel M.M., Ashfaq U.A., Tahir Ul Qamar M., Shahid F., Ahmad S., Alatawi E.A., Albalawi G.M., Allemailem K.S., Almatroudi A.	Structural Elucidation of Rift Valley Fever Virus L Protein towards the Discovery of Its Potential Inhibitors	2022	Pharmaceuticals	15	6		

700	Shahzadi M., Bokhari T.H., Nazish N., Usman M., Ezzine S., Alwadai N., Iqbal M., Alfryyan N., Iqbal M., Khosa M.K., Abbas M.	Degradation of Reactive Yellow 18 Using Ionizing Radiation Based Advanced Oxidation Processes: Cytotoxicity, Mutagenicity and By-Product Distribution	2022	Water (Switzerland)	14	11		
701	Khan I.U., Shoukat M., Asif M., Khalid S.H., Asghar S., Munir M.U., Irfan M., Rasul A., Qari S.H., Qumsani A.T., Hassan M.M., Alahdal M.A., Usman M., Khan Z.	Assessing the Synergistic Activity of Clarithromycin and Therapeutic Oils Encapsulated in Sodium Alginate Based Floating Microbeads	2022	Microorganisms	10	6		
702	Hussain A., Akbar M., Khan M.K., SokolovÃ¡ M., Akbar A.	The Interplay of Leverage, Financing Constraints and Real Earnings Management: A Panel Data Approach	2022	Risks	10	6		
703	Zeng L.-H., Barkat M.Q., Syed S.K., Shah S., Abbas G., Xu C., Mahdy A., Hussain N., Hussain L., Majeed A., Khan K.-U.-R., Wu X., Hussain M.	Hedgehog Signaling: Linking Embryonic Lung Development and Asthmatic Airway Remodeling	2022	Cells	11	11		
704	Zhang S., Shah S.A.-U.-M., Basharat K., Qamar S.A., Raza A., Mohamed A., Bilal M., Iqbal H.M.N.	Silk-based nano-hydrogels for futuristic biomedical applications	2022	Journal of Drug Delivery Science and Technology	72			

705	Khan M.T.I., Anwar S.	Natural disasters and foreign exchange reserves: The role of renewable energy and human capital	2022	Renewable Energy	192		838	848
706	Malik S., Shahid A., Haider M.N., Amin M., Betenbaugh M.J., Mehmood M.A., Haq M.A.U., Syafiuddin A., Boopathy R.	Prospects of Multiproduct Algal Biorefineries Involving Cascading Processing of the Biomass Employing a Zero-Waste Approach	2022	Current Pollution Reports	8	2	147	158
707	Rashid S., Khalid A., Sultana S., Jarad F., Abualnaja K.M., Hamed Y.S.	Novel numerical investigation of the fractional oncolytic effectiveness model with M1 virus via generalized fractional derivative with optimal criterion	2022	Results in Physics	37			
708	Ijaz M.U., Ayaz F., Mustafa S., Ashraf A., Albeshr M.F., Riaz M.N., Mahboob S.	Toxic effect of polyethylene microplastic on testicles and ameliorative effect of luteolin in adult rats: Environmental challenge	2022	Journal of King Saud University - Science	34	4		
709	Khan M.K., Tahir S.A., Ashfaq A., Ali A., Ahmad W., Haneef M., Mushtaq S., Saeed R., Khan K.M., shabbir K.	Enhancement of the structural, optical and thermoelectric properties of thermally evaporated AgMoO <sub>3</sub> thin film by post-annealing	2022	Optical Materials	128			

710	Javaid A., Zahra D., Rashid F., Mashraqi M., Alzamami A., Khurshid M., Ali Ashfaq U.	Regulation of micro-RNA, epigenetic factor by natural products for the treatment of cancers: Mechanistic insight and translational association	2022	Saudi Journal of Biological Sciences	29	6		
711	Ullah S., Munir B., Al-Sehem A.G., Muhammad S., Haq I.-U., Aziz A., Ahmed B., Ghaffar A.	Identification of phytochemical inhibitors of SARS-CoV-2 protease 3CLpro from selected medicinal plants as per molecular docking, bond energies and amino acid binding energies	2022	Saudi Journal of Biological Sciences	29	6		
712	Usman M., Hameed Y., Ahmad M., Ur Rehman J., Ahmed H., Hussain M.S., Asif R., Murtaza M.G., Jawad M.T., Iqbal M.J.	Breast Cancer Risk and Human Papillomavirus Infection: A Bradford Hill Criteria Based Evaluation	2022	Infectious Disorders - Drug Targets	22	4		
713	Fareed M.M., Ullah S., Aziz S., Johnsen T.A., Shityakov S.	In-silico analysis of non-synonymous single nucleotide polymorphisms in human $\beta^2$ -defensin type 1 gene reveals their impact on protein-ligand binding sites	2022	Computational Biology and Chemistry	98			
714	Safdar R., Jawad M., Hussain S., Imran M., AkgÃ¼l A., Jamshed W.	Thermal radiative mixed convection flow of MHD Maxwell nanofluid: Implementation of buongiorno's model	2022	Chinese Journal of Physics	77		1465	1478

715	Alnuwaiser M.A., Javaid K., Jacob J., Saleem M., Liang L., Cao H., Amami M., Mahmood K., Ali A., Amin N., Ikram S.	Annealing induced morphology evolution and phase transition in SnO <sub>x</sub> thin films grown by e-beam evaporation method	2022	Inorganic Chemistry Communications	140			
716	Noor F., Ahmad S., Saleem M., Alshaya H., Qasim M., Rehman A., Ehsan H., Talib N., Saleem H., Bin Jardan Y.A., Aslam S.	Designing a multi-epitope vaccine against Chlamydia pneumoniae by integrating the core proteomics, subtractive proteomics and reverse vaccinology-based immunoinformatics approaches	2022	Computers in Biology and Medicine	145			
717	Ashfaq A., Tahir S., Rehman U.U., Ali A., Ashfaq H.F., Ahmad W., Mushtaq S., Saeed R., Haneef M., Khan K.M., Shabbir K.	Structural, morphological and thermoelectric properties of copper deficient and excessive Cu <sub>2-x</sub> S nanoparticles with (x=0-0.3)	2022	Surfaces and Interfaces	30			
718	Noor K.K., Ijaz M.U., Ehsan N., Tahir A., Yeni D.K., Neamul Kabir Zihad S.M., Uddin S.J., Ashraf A., Simal-Gandara J.	Hepatoprotective role of vitexin against cadmium-induced liver damage in male rats: A biochemical, inflammatory, apoptotic and histopathological investigation	2022	Biomedicine and Pharmacotherapy	150			
719	Hayat R., Manzoor M., Hussain A.	Wnt signaling pathway: A comprehensive review	2022	Cell Biology International	46	6	863	877

720	Rehman S., Hussain A., Rahman J.U., Anjum N., Munir T.	Modified Laplace Based Variational Iteration Method for the Mechanical Vibrations and its Applications	2022	Acta Mechanica et Automatica	16	2	98	102
721	Kalsoom U., Ahsan Z., Bhatti H.N., Amin F., Nadeem R., Aftab K., Bilal M.	Iron oxide nanoparticles immobilized Aspergillus flavus manganese peroxidase with improved biocatalytic, kinetic, thermodynamic, and dye degradation potentialities	2022	Process Biochemistry	117		117	133
722	Usman A., Ozturk I., Naqvi S.M.M.A., Ullah S., Javed M.I.	Revealing the nexus between nuclear energy and ecological footprint in STIRPAT model of advanced economies: Fresh evidence from novel CS-ARDL model	2022	Progress in Nuclear Energy	148			
723	Adem Åž., Eyupoglu V., Ibrahim I.M., Sarfraz I., Rasul A., Ali M., Elfiky A.A.	Multidimensional in silico strategy for identification of natural polyphenols-based SARS-CoV-2 main protease (Mpro) inhibitors to unveil a hope against COVID-19	2022	Computers in Biology and Medicine	145			

724	Rauf A., Akram M., Anwar H., Daniyal M., Munir N., Bawazeer S., Bawazeer S., Rebezov M., Bouyaha A., Shariati M.A., Thiruvengadam M., Sarsembenova O., Mabkhot Y.N., Islam M.N., Emran T.B., Hodak S., Zengin G., Khan H.	Therapeutic potential of herbal medicine for the management of hyperlipidemia: latest updates	2022	Environmental Science and Pollution Research	29	27	40281	40301
725	Raza S.H., Shahzadi A., Iqbal M., Shafiq F., Mahmood A., Anwar S., Ashraf M.	Foliar application of nano-zinc oxide crystals improved zinc biofortification in cauliflower ( <i>Brassica oleracea</i> L. var. <i>botrytis</i> )	2022	Applied Nanoscience (Switzerland)	12	6	1803	1813
726	Jeyavani J., Sibiya A., Bhavaniramya S., Mahboob S., Al-Ghanim K.A., Nisa Z.-U., Riaz M.N., Nicoletti M., Govindarajan M., Vaseeharan B.	Toxicity evaluation of polypropylene microplastic on marine microcrustacean <i>Artemia salina</i> : An analysis of implications and vulnerability	2022	Chemosphere	296			
727	Aslam S., Ashfaq U.A., Zia T., Aslam N., Alrumaihi F., Shahid F., Noor F., Qasim M.	Proteome based mapping and reverse vaccinology techniques to contrive multi-epitope based subunit vaccine (MEBSV) against <i>Streptococcus pyogenes</i>	2022	Infection, Genetics and Evolution	100			

728	Arif M.U., Khan M.K.I., Riaz S., Nazir A., Maan A.A., Amin U., Saeed F., Afzaal M.	Role of fruits in aging and age-related disorders	2022	Experimental Gerontology	162			
729	Yasin M., Saeed M., Muneer M., Usman M., ul Haq A., Sadia M., Altaf M.	Development of Bi2O3-ZnO heterostructure for enhanced photodegradation of rhodamine B and reactive yellow dyes	2022	Surfaces and Interfaces	30			
730	Rehman U.U., Jacob J., Al-Harbi F.F., Ashfaq A., Mahmood K., Ali A., Amin N., Amami M., Hussain S., Javaid K., Ikram S., Sahar K.U.	Modulation of thermoelectric power generation performance of ZnO nanostructures by controlling the Mn atoms concentration	2022	Ceramics International	48	11	16183	16187
731	Farooq T.H., Kumar U., Yan Y., Arif M.S., Shakoor A., Tayyab M., Rathod P.H., Altaf M.M., Wu P.	Receptiveness of soil bacterial diversity in relation to soil nutrient transformation and canopy growth in Chinese fir monoculture influenced by varying stand density	2022	Trees - Structure and Function	36	3	1149	1160
732	Mansha A., Asad S.A., Asim S., Bibi S., Rehman S.-U., Shahzad A.	Review of recent advancements in fluorescent chemosensor for ion detection via coumarin derivatives	2022	Chemical Papers	76	6	3303	3349

733	Faheem M., Riaz S., Javed Y., Aziz H., Ashraf M., Younus A., Rehman F., Ali K.	Rapid Single-Step Synthesis and Crystal Structure Analysis of Cu:ZnO Photocatalyst for Efficient Degradation of Reactive Dyes Under UVâ€“Visible Light Irradiation	2022	Arabian Journal for Science and Engineering	47	6	7729	7745
734	Ali S., Bani Mfarrej M.F., Rizwan M., Hussain A., Shahid M.J., Wang X., Nafees M., Waseem M., Alharby H.F.	Microbe-citric acid assisted phytoremediation of chromium by castor bean ( <i>Ricinus communis L.</i> )	2022	Chemosphere	296			
735	Khan I., Iqbal M., Raza S.H., Anwar S., Ashraf M., Shafiq F.	Tartaric acid soil-amendment increases phytoextraction potential through root to shoot transfer of lead in turnip	2022	Chemosphere	296			
736	Hussain S.M., Gohar H., Asrar M., Shahzad M.M., Rasul A., Hussain M., Arsalan M.Z.U.H., Ahmad N.	Effects of Polyphenols Supplemented Canola Meal Based Diet on Proximate Composition, Minerals Absorption and Hematology of <i>Cyprinus carpio</i> Fingerlings	2022	Pakistan Journal of Zoology	54	3	1071	1079
737	Ahmad N., Hussain S.M., Rasul A., Shahzad M.M., Javid A., Azmat H., Arsalan Z.U.H., Tabassum S., Ahmad B.	Effect of Nano-Se Particles Supplemented Sunflower Meal Based Diets on Mineral Absorption and Carcass Composition of <i>Cirrhinus mrigala</i> Fingerlings	2022	Pakistan Journal of Zoology	54	3	1103	1113

738	Junaid H.M., Waseem M.T., Khan Z.A., Gul H., Yu C., Shaikh A.J., Shahzad S.A.	Fluorescent and colorimetric sensors for selective detection of TNT and TNP explosives in aqueous medium through fluorescence emission enhancement mechanism	2022	Journal of Photochemistry and Photobiology A: Chemistry	428			
739	Ali Q., Zheng H., Rao M.J., Ali M., Hussain A., Saleem M.H., Nehela Y., Sohail M.A., Ahmed A.M., Kubar K.A., Ali S., Usman K., Manghwar H., Zhou L.	Advances, limitations, and prospects of biosensing technology for detecting phytopathogenic bacteria	2022	Chemosphere	296			
740	Tahir M.A., Saif ur Rahman M., Nisha F., Shahzad F., Jawad M.T., Bahadur A., Qamar M.A., Shoaib M.	Hydroxycarbonate apatite formation and 5-fluorouracil delivery by strontium containing mesoporous bioactive glass nanoparticles	2022	Ceramics International	48	11	15862	15867
741	Ashraf M.A., Rasheed R., Hussain I., Iqbal M., Farooq M.U., Saleem M.H., Ali S.	Taurine modulates dynamics of oxidative defense, secondary metabolism, and nutrient relation to mitigate boron and chromium toxicity in <i>Triticum aestivum</i> L. plants	2022	Environmental Science and Pollution Research	29	30	45527	45548
742	Yousaf M., Rasheed A., Ahmad M., Farid A., Khan I.A.	Role of annealing temperature on structural and optical properties of zinc oxy-nitride films synthesized by powder vapor transport technique	2022	Ceramics International	48	11	15371	15379

743	Nazeer M., Khan M.I., Khan S.U., Saleem A., Muhammad T., Shah S.I.	Assessment of heat and mass transfer characteristics in Poiseuille flow of non-Newtonian nanofluid in a porous channel with convectively heated lower wall	2022	Chinese Journal of Physics	77		1065	1079
744	Bano T., Zahoor A.F., Rasool N., Irfan M., Mansha A.	Recent trends in Grubbs catalysis toward the synthesis of natural products: a review	2022	Journal of the Iranian Chemical Society	19	6	2131	2170
745	Shafique N., Raza S., Bibi S., Farhan M., Riaz M.	A simplified passive islanding detection technique based on susceptible power indice with zero NDZ	2022	Ain Shams Engineering Journal	13	4		
746	Akhtar N., Abid M., Amir M.W., Abbas Z., Nazir H.Z., Raza Z., Riaz M.	Design and analysis of exponentially weighted moving average control charts for monitoring the variability of log-normal processes with estimated parameters	2022	Quality and Reliability Engineering International	38	4	1590	1611
747	Mfarrej M.F.B., Wang X., Hamzah Saleem M., Hussain I., Rasheed R., Arslan Ashraf M., Iqbal M., Sohaib Chattha M., Nasser Alyemeni M.	Hydrogen sulphide and nitric oxide mitigate the negative impacts of waterlogging stress on wheat ( <i>Triticum aestivum L.</i> )	2022	Plant Biology	24	4	670	683

748	Ahmad H.M., Wang X., Mahmood-Ur-Rahman, Fiaz S., Azeem F., Shaheen T.	Morphological and Physiological Response of <i>Helianthus annuus</i> L. to Drought Stress and Correlation of Wax Contents for Drought Tolerance Traits	2022	Arabian Journal for Science and Engineering	47	6	6747	6761
749	Ayesha R., Rasheed A., Ali M., Zeba I., Jamil M.	Dispersive Features of Plasma Waves in Nano-Waveguide Systems	2022	Arabian Journal for Science and Engineering	47	6	7473	7478
750	Laraib N., Hussain A., Javid A., Noor T., Ahmad Q.-U.-A., Chaudhary A., Manzoor M., Akmal M., Bukhari S.M., Ali W., Choi T.J., Schenk P.M.	Recent trends in microalgal harvesting: an overview	2022	Environment, Development and Sustainability	24	6	8691	8721
751	Akhtar R., Zahoor A.F., Rasool N., Ahmad M., Ali K.G.	Recent trends in the chemistry of Sandmeyer reaction: a review	2022	Molecular Diversity	26	3	1837	1873
752	Hussain M., Ali A., Ghaffar A., Inc M.	Flow and thermal study of MHD Casson fluid past a moving stretching porous wedge	2022	Journal of Thermal Analysis and Calorimetry	147	12	6959	6969
753	Hussain I., Saleem M.H., Mumtaz S., Rasheed R., Ashraf M.A., Maqsood F., Rehman M., Yasmin H., Ahmed S., Ishtiaq M., Anwar S., Ali S.	Choline Chloride Mediates Chromium Tolerance in Spinach ( <i>Spinacia oleracea</i> L.) by Restricting its Uptake in Relation to Morpho-physio-biochemical Attributes	2022	Journal of Plant Growth Regulation	41	4	1594	1614

754	Iqbal S.M., Hussain L., Hussain M., Akram H., Asif M., Jamshed A., Saleem A., Siddique R.	Nephroprotective Potential of a Standardized Extract of Bambusa arundinacea: In Vitro and In Vivo Studies	2022	ACS Omega	7	21	18159	18167
755	Amjad N., Bhatti I.A., Simon L., Castel C.D., Zia K.M., Zuber M., Hafiz I., Murtaza M.A.	Preparation and characterization of thermoplastic polyurethanes blended with chitosan and starch processed through extrusion	2022	International Journal of Biological Macromolecules	208		37	44
756	Jilani A., Ansari M.O., Rehman G.U., Shakoor M.B., Hussain S.Z., Othman M.H.D., Ahmad S.R., Dustgeer M.R., Alshahrie A.	Phenol removal and hydrogen production from water: Silver nanoparticles decorated on polyaniline wrapped zinc oxide nanorods	2022	Journal of Industrial and Engineering Chemistry	109		347	358
757	Mahmood F., Riaz A., Ateeq A., Mahmood S., Riaz N.	The Nexus of Human Capital, Information Communication Technologies and Research and Development Expenditure in Promoting Environmental Sustainability: Does Financial Development Matter?	2022	International Journal of Energy Economics and Policy	12	3	497	504

758	Khan F.U., Mallhi T.H., Khan F.U., Hayat K., Rehman A., Shah S., Khan Z., Khan Y.H., Ahmad T., Gudi S.K., KarataÅŸ Y., Fang Y.	Evaluation of Consumers Perspective on the Consumption of Antibiotics, Antibiotic Resistance, and Recommendations to Improve the Rational use of Antibiotics: An Exploratory Qualitative Study From Post-Conflicted Region of Pakistan	2022	Frontiers in Pharmacology	13			
759	Saleem A., Qurat-ul-Ain, Akhtar M.F.	Alternative Therapy of Psychosis: Potential Phytochemicals and Drug Targets in the Management of Schizophrenia	2022	Frontiers in Pharmacology	13			
760	Nadeem S., Javed M., Iqbal S., Mohyuddin A., Mahmood Q., Abbas Q., Alfryyan N., Alqahtani M.D., Alotaibi M.T., Alsaab H.O., Awwad N.S., Ibrahim H.A., Elkaeed E.B., Ahmad M.N., Haroon S.M., Raza H.	Facile Synthesis of Catalyst Free Carbon Nanoparticles From the Soot of Natural Oils	2022	Frontiers in Materials	9			
761	Nayak M.K., Shaw S., Waqas H., Muhammad T.	Numerical computation for entropy generation in Darcy-Forchheimer transport of hybrid nanofluids with Cattaneo-Christov double-diffusion	2022	International Journal of Numerical Methods for Heat and Fluid Flow	32	6	1861	1882

762	Taj S., Ahmad M., Ashfaq U.A.	Exploring of novel 4-hydroxy-2H-benzo[e][1,2]thiazine-3-carbohydrazide 1,1-dioxide derivative as a dual inhibitor of $\beta$ -glucosidase and $\alpha$ -amylase: Molecular docking, biochemical, enzyme kinetic and in-vivo mouse model study	2022	International Journal of Biological Macromolecules	207		507	521
763	Arshad M.I., Hasan M.S., Rehman A.U., Akhtar M., Tung L.D., Amin N., Mahmood K., Ali A., Trakoolwilaiwan T., Thanh N.T.K.	Structural, optical, electrical, dielectric, molecular vibrational and magnetic properties of La <sup>3+</sup> doped Mg <sup>2+</sup> Cd <sup>2+</sup> Cu ferrites prepared by Co-precipitation technique	2022	Ceramics International	48	10	14246	14260
764	Liu X., Nawaz Z., Guo C., Ali S., Naeem M.A., Jamil T., Ahmad W., Siddiq M.U., Ahmed S., Asif Idrees M., Ahmad A.	Rabies Virus Exploits Cytoskeleton Network to Cause Early Disease Progression and Cellular Dysfunction	2022	Frontiers in Veterinary Science	9			
765	Chen D., Mubeen B., Hasnain A., Rizwan M., Adrees M., Naqvi S.A.H., Iqbal S., Kamran M., El-Sabrout A.M., Elansary H.O., Mahmoud E.A., Alaklabi A., Sathish M., Din G.M.U.	Role of Promising Secondary Metabolites to Confer Resistance Against Environmental Stresses in Crop Plants: Current Scenario and Future Perspectives	2022	Frontiers in Plant Science	13			

766	Saleem A., Khalid H., Akhtar M.F., Zeb A.	HPLC -DAD analysis, anti-inflammatory and anti-arthritis potentials of <i>Coronopus didymus</i> (L.) Sm. extracts: effects on pro- and anti-inflammatory cytokines, COX-2, I- $\hat{o}\hat{l}^2$ , NF- $\hat{o}\hat{l}^2$ and oxidative stress biomarkers	2022	Food and Function	13	11	6244	6258
767	Ma W., Tariq A., Ali M.W., Nawaz M.A., Wang X.	An Empirical Investigation of Virtual Networking Sites Discontinuance Intention: Stimuli Organism Response-Based Implication of User Negative Disconfirmation	2022	Frontiers in Psychology	13			
768	Ali A., Khalid M., Ashfaq M., Malik A.N., Tahir M.N., Assiri M.A., Imran M., de AlcÃ¢ntaraMorais S.F., Braga A.A.C.	Preparation, QTAIM and Single-Crystal Exploration of the Pyrimethamine-Based Co-Crystal Salts with Substituted Benzoic Acids	2022	ChemistrySelect	7	17		
769	Ilyas Q., Waseem M.T., Junaid H.M., Ali Khan Z., Munir F., Shaikh A.J., Shahzad S.A.	Fluorescein based fluorescent and colorimetric sensors for sensitive detection of TNP explosive in aqueous medium: Application of logic gate	2022	Spectrochimica Acta - Part A: Molecular and Biomolecular Spectroscopy	272			
770	Bari A., Ikram M., Haider A., Ul-Hamid A., Haider J., Shahzadi I., Nazir G., Shahzadi A., Imran M., Ghaffar A.	Evaluation of bactericidal potential and catalytic dye degradation of multiple morphology based chitosan/polyvinylpyrrolidone-doped bismuth oxide nanostructures	2022	Nanoscale Advances	4	12	2713	2728

771	Ma J., Alshaya H., Okla M.K., Alwasel Y.A., Chen F., Adrees M., Hussain A., Hameed S., Shahid M.J.	Application of Cerium Dioxide Nanoparticles and Chromium-Resistant Bacteria Reduced Chromium Toxicity in Sunflower Plants	2022	Frontiers in Plant Science	13			
772	Yahya M., Rasul M., Sarwar Y., Suleman M., Tariq M., Hussain S.Z., Sajid Z.I., Imran A., Amin I., Reitz T., Tarkka M.T., Yasmin S.	Designing Synergistic Biostimulants Formulation Containing Autochthonous Phosphate-Solubilizing Bacteria for Sustainable Wheat Production	2022	Frontiers in Microbiology	13			
773	Ayaz M., Anwar F., Saleem U., Shahzadi I., Ahmad B., Mir A., Ismail T.	Parkinsonism Attenuation by Antihistamines via Downregulating the Oxidative Stress, Histamine, and Inflammation	2022	ACS Omega	7	17	14772	14783
774	Bilal M., Akram U., Rasool H., Yang X., Tanveer Y.	Social commerce isn't the cherry on the cake, its the new cake! How consumers' attitudes and eWOM influence online purchase intention in China	2022	International Journal of Quality and Service Sciences	14	2	180	196
775	Ahmad I., Hadj-Taieb L., Hussain M., Khadimallah M.A., Taj M., Alshoaihi A.	Hierarchical structure parameters in three dimensional turbulence: She-Leveque model	2022	Smart Structures and Systems	29	5	747	755

776	Rehman S., Akhtar Shad N., Munir Sajid M., Ali K., Javed Y., Jamil Y., Sajjad M., Nawaz A., Kumar Sharma S.	Tuning Structural and Optical Properties of Copper Oxide Nanomaterials by Thermal Heating and Its Effect on Photocatalytic Degradation of Congo Red Dye	2022	Iranian Journal of Chemistry and Chemical Engineering	41	5	1549	1560
777	Nieves-Cordones M., Azeem F., Long Y., Boeglin M., Duby G., Mouline K., Hosy E., Vavasseur A., Chrel I., Simonneau T., Gaymard F., Leung J., Gaillard I., Thibaud J.-B., Vry A.-A., Boudaoud A., Sentenac H.	Non-autonomous stomatal control by pavement cell turgor via the K+channel subunit AtKC1	2022	Plant Cell	34	5	2019	2037
778	Sheikh F.A., Aamir M.N., Haseeb M.T., Shah M.A., Farid-Ul-Haq M., Alqarni M., Vargas-De-La-Cruz C., Blundell R.	Appraisal of the pharmacokinetic profile, histopathology, and stability studies of a fast dissolving oral film based on natural polysaccharide	2022	Pakistan Journal of Pharmaceutical Sciences	35	3	937	944
779	Shahzadi I., Parveen B., Ahmad S., Khan S.G., Zahoor A.F., Rasul A., Zahid F.M.	In-vitro cytotoxic evaluation, hemolytic and thrombolytic potential of newly designed acefylline based hydrazones as potent anticancer agents against human lung cancer cell line (A549)	2022	Pakistan Journal of Pharmaceutical Sciences	35	3	885	889

780	Hussain M.	FG-based computational fracture of frequency up-conversion for bistability of rotating shell: An effective numerical scheme	2022	Advances in Concrete Construction	13	5	367	376
781	Bennai R., Mellal F., Nebab M., Fourn H., Benadouda M., Atmane H.A., Tounsi A., Hussain M.	On wave dispersion properties of functionally graded plates resting on elastic foundations using quasi-3D and 2D HSDT	2022	Earthquake and Structures	22	5	447	460
782	Jabeen M., Akram N.A., Ashraf M., Tyagi A., El-Sheikh M.A., Ahmad P.	Thiamin stimulates growth, yield quality and key biochemical processes of cauliflower ( <i>Brassica oleracea</i> L. var. <i>Botrytis</i> ) under arid conditions	2022	PLoS ONE	17	5 5		
783	Ateeq M., Adeel M.M., Kanwal A., Qamar M.T.U., Saeed A., Khalil B., Saeed Q., Atiq M.N., Bilal M., Alharbi M., Alshammari A., Akrem A.	In Silico Analysis and Functional Characterization of Antimicrobial and Insecticidal Vicilin from Moth Bean ( <i>Vigna aconitifolia</i> (Jacq.) Marechal) Seeds	2022	Molecules	27	10		
784	Zafar K., Zia K.M., Alzhrani R.M., Almalki A.H., Alshehri S.	Biocompatibility and Hemolytic Activity Studies of Synthesized Alginate-Based Polyurethanes	2022	Polymers	14	10		

	Iftikhar A., Nausheen R., Muzaffar H., Naeem M.A., Farooq M., Khurshid M., Almatroudi A., Alrumaihi F., Allemailem K.S., Anwar H.	Potential Therapeutic Benefits of Honey in Neurological Disorders: The Role of Polyphenols	2022	Molecules	27	10		
785	Noor F., Qamar M.T.U., Ashfaq U.A., Albutti A., Alwashmi A.S.S., Aljasir M.A.	Network Pharmacology Approach for Medicinal Plants: Review and Assessment	2022	Pharmaceuticals	15	5		
786	Ahmad A., Khan S., Tariq S., Luque R., Verpoort F.	Self-sacrifice MOFs for heterogeneous catalysis: Synthesis mechanisms and future perspectives	2022	Materials Today	55		137	169
787	Sardar A., Abid O.-U.-R., Daud S., Fakhar-e-Alam M., Siddique M.H., Ashraf M., Shahid W., Ejaz S.A., Atif M., Ahmad S., Shafeeq S., Afzal M.	Design, synthesis, in vitro and in silico studies of naproxen derivatives as dual lipoxygenase and $\beta$ -glucosidase inhibitors	2022	Journal of Saudi Chemical Society	26	3		
788	Kiran S., Rasheed U., Imran M., Hussain F., Niaz N.A., Khera E.A., Khalil R.M.A., Nazir A.	Theoretical investigation of doped LiMg <sub>1-x</sub> Y <sub>x</sub> N (Y = Ag, Cu, Mn, Zn) for RRAM application	2022	Journal of Ovonic Research	18	3	301	315
789								

790	Kousar T., Bokhari T.H., Altaf A., Haq A.U., Muneer M., Farhat L.B., Alwadai N., Alfryyan N., Jilani M.I., Iqbal M., Khan M.I., Khosa M.K.	SnO <sub>2</sub> /UV/H <sub>2</sub> O <sub>2</sub> and TiO <sub>2</sub> /UV/H <sub>2</sub> O <sub>2</sub> Efficiency for the Degradation of Reactive Yellow 160A: By-Product Distribution, Cytotoxicity and Mutagenicity Evaluation	2022	Catalysts	12	5		
791	Rehman F.U., Adeel S., Haddar W., Bibi R., Azeem M., Mia R., Ahmed B.	Microwave-Assisted Exploration of Yellow Natural Dyes for Nylon Fabric	2022	Sustainability (Switzerland)	14	9		
792	Ajaz N., Khan I.U., Irfan M., Khalid S.H., Asghar S., Mehmood Y., Asif M., Usra, Hussain G., Shahzad Y., Shah S.U., Munir M.U.	In Vitro and Biological Characterization of Dexamethasone Sodium Phosphate Laden pH-Sensitive and Mucoadhesive Hydroxy Propyl $\beta$ -Cyclodextrin-g-poly(Acrylic Acid)/Gelatin Semi-Interpenetrating Networks	2022	Gels	8	5		
793	Mehmood T., Saleem F., Javed S., Nawaz S., Sultan A., Safdar A., Ullah A., Waseem R., Saeed S., Abbas M., Bilal M., Ahmad M.M., Firyal S.	Biotransformation of Agricultural By-Products into Biovanillin through Solid-State Fermentation (SSF) and Optimization of Different Parameters Using Response Surface Methodology (RSM)	2022	Fermentation	8	5		

	Fatima I., Rasul A., Shah S., Saadullah M., Islam N., Khames A., Salawi A., Ahmed M.M., Almoshari Y., Abbas G., Abourehab M.A.S., Khan S.M., Chauhdary Z., Alshamrani M., Namazi N.I., Naguib D.M.	Novasomes as Nano-Vesicular Carriers to Enhance Topical Delivery of Fluconazole: A New Approach to Treat Fungal Infections	2022	Molecules	27	9		
794	Mustafa G., Mahrosh H.S., Zafar M., Attique S.A., Arif R.	Exploring the antihyperglycemic potential of tetrapeptides devised from AdMc1 via different receptor proteins inhibition using in silico approaches	2022	International Journal of Immunopathology and Pharmacology	36			
795	Hussain S., Qu S.-W., Sharif A.B., Sani Abubakar H., Wang X.-H., Imran M.A., Abbasi Q.H.	Current Sheet Antenna Array and 5G: Challenges, Recent Trends, Developments, and Future Directions	2022	Sensors	22	9		
796	Albekairi T.H., Alshammari A., Alharbi M., Alshammary A.F., Ul Qamar M.T., Anwar T., Ismail S., Shaker B., Ahmad S.	Design of a Multi-Epitope Vaccine against <i>Tropheryma whipplei</i> Using Immunoinformatics and Molecular Dynamics Simulation Techniques	2022	Vaccines	10	5		

798	Alotaibi N.H., Munir M.U., Alruwaili N.K., Alharbi K.S., Ihsan A., Almurshedi A.S., Khan I.U., Bukhari S.N.A., Rehman M., Ahmad N.	Synthesis and Characterization of Antibioticâ€“Loaded Biodegradable Citrate Functionalized Mesoporous Hydroxyapatite Nanocarriers as an Alternative Treatment for Bone Infections	2022	Pharmaceutics	14	5		
799	Hashir M., Rehman T.-U., Kanti P., Javaid M.Y., Park C.-W.	Experimental Analysis on Fatigue Life Assessment of Dissimilar Aluminum Alloys Weld Joints under Four-Point Rotating Bending Condition	2022	Applied Sciences (Switzerland)	12	9		
800	Nazir M.S., Abdalla A.N., Metwally A.S.M., Imran M., Bocchetta P., Javed M.S.	Cryogenic-Energy-Storage-Based Optimized Green Growth of an Integrated and Sustainable Energy System	2022	Sustainability (Switzerland)	14	9		
801	Albekairi T.H., Alshammari A., Alharbi M., Alshammary A.F., Tahir UI Qamar M., Ullah A., Irfan M., Ahmad S.	Designing of a Novel Multi-Antigenic Epitope-Based Vaccine against <i>E. hormaechei</i> : An Intergraded Reverse Vaccinology and Immunoinformatics Approach	2022	Vaccines	10	5		
802	Ashfaq T., Khan M., Arshad I., Ahmad A., Ali S., Aftab K., Al-Kahtani A.A., Tighezza A.M.	Electro-Oxidation of Metal Oxide-Fabricated Graphitic Carbon Nitride for Generation of Hydrogen Production via Water Splitting	2022	Coatings	12	5		

803	Noor F., Saleem M.H., Javed M.R., Chen J.-T., Ashfaq U.A., Okla M.K., Abdel-Maksoud M.A., Alwasel Y.A., Al-Qahtani W.H., Alshaya H., Yasin G., Aslam S.	Comprehensive computational analysis reveals H5N1 influenza virus-encoded miRNAs and host-specific targets associated with antiviral immune responses and protein binding	2022	PLoS ONE	17	45417		
804	Ud-Din M., Albutti A., Ullah A., Ismail S., Ahmad S., Naz A., Khurram M., Ul Haq M., Afsheen Z., Bakri Y.E., Salman M., Shaker B., Qamar M.T.U.	Vaccinomics to Design a Multi-Epitopes Vaccine for <i>Acinetobacter baumannii</i>	2022	International Journal of Environmental Research and Public Health	19	9		
805	Mazhar M.W., Ishtiaq M., Maqbool M., Akram R., Shahid A., Shokralla S., Al-Ghobari H., Alataway A., Dewidar A.Z., El-Sabrout A.M., Elansary H.O.	Seed Priming with Iron Oxide Nanoparticles Raises Biomass Production and Agronomic Profile of Water-Stressed Flax Plants	2022	Agronomy	12	5		
806	Choi J.R., Kozalak G., Di Bari I., Babar Q., Niknam Z., Rasmi Y., Yong K.W.	In Vitro Human Cancer Models for Biomedical Applications	2022	Cancers	14	9		

807	Raza M., Malik S.N., Xin Q., Din M.U., CotÃ®rlÄf L.-I.	On Kudriakov Conditions for Univalence of Integral Operators Defined by Generalized Bessel Functions	2022	Mathematics	10	9		
808	Premkumar A., Javed M.T., Pawlowski K., Lindberg S.M.	Silicate Inhibits the Cytosolic Influx of Chloride in Protoplasts of Wheat and Affects the Chloride Transporters, TaCLC1 and TaNPF2.4/2.5	2022	Plants	11	9		
809	Akhter N., Habiba O., Hina M., Shahnaz M.M., Alzuairi F.M., Alamri S., Hashem M., Khalid N., Aqeel M., Noman A.	Structural, Biochemical, and Physiological Adjustments for Toxicity Management, Accumulation, and Remediation of Cadmium in Wetland Ecosystems by <i>Typha domingensis</i> Pers	2022	Water, Air, and Soil Pollution	233	5		
810	Salman M., Tariq A., Mustafa G., Javed M.R., Naheed S., Qamar S.A.	Cyclo(L-Leucyl-L-Prolyl) from <i>Lactobacillus coryniformis</i> BCH-4 inhibits the proliferation of <i>Aspergillus flavus</i> : an in vitro to in silico approach	2022	Archives of Microbiology	204	5		
811	Saeed F., Afzaal M., Ahmad A., Aamir M., Aziz M., Aslam S., Ateeq H., Hussain M.	Enhanced viability of microencapsulated lyophilized probiotics under in vitro simulated gastrointestinal conditions	2022	Journal of Food Processing and Preservation	46	5		

812	Ullah I., Jacob J., Al-Harbi F.F., Mahmood K., Ali A., Tamseel M., Ikram S., Amin N., Javaid K., Ben Farhat L., Hussain S., Yasir Ali M.	Investigating the potential of AgZnO thin film composites for waste heat recovery using Seebeck data	2022	Optical Materials	127			
813	Khalid Z., Shafqat S.S., Ahmad H.A., Rehman H.M., Munawar M.A., Ahmad M., Asiri A.M., Ashraf M.	Synthesis of 1,2,3-benzotriazin-4(3H)-one derivatives as Î±-glucosidase inhibitor and their in-silico study	2022	Medicinal Chemistry Research	31	5	819	831
814	Saleem M., Schini-Kerth V.B., Hussain K., Khalid S.H., Asif M., Alhosin M., Akhtar M.F., Ahmad B., Raza A., Mahrukh	Molecular Mechanisms Responsible for In Vitro Cytotoxic Attributes of Conyza bonariensis Extract against Lymphoblastic Leukaemia Jurkat Cells	2022	Anti-Cancer Agents in Medicinal Chemistry	22	9	1793	1801
815	Ijaz M.U., Tahir A., Ahmed H., Ashraf A., Ahmedah H.T., Muntean L., Moga M., Irimie M.	Chemoprotective effect of vitexin against cisplatin-induced biochemical, spermatological, steroidogenic, hormonal, apoptotic and histopathological damages in the testes of Sprague-Dawley rats	2022	Saudi Pharmaceutical Journal	30	5	519	526

816	Khera E.A., Rasheed U., Imran M., Ullah H., Hussain F., Khalil R.M.A., Kousar F., Qasim M.	An insight into structural, electronic and optical characteristics of Mo <sub>1-x</sub> M <sub>x</sub> O <sub>3</sub> (M = Zr, Y, ZrY) for the formation of conducting filaments in optoelectronic memory devices: A first principles study	2022	Optik	258			
817	Wu X., Hussain M., Syed S.K., Saadullah M., Alqahtani A.M., Alqahtani T., Aldahish A., Fatima M., Shaukat S., Hussain L., Jamil Q., Mukhtar I., Khan K.-U.-R., Zeng L.-H.	Verapamil attenuates oxidative stress and inflammatory responses in cigarette smoke (CS)-induced murine models of acute lung injury and CSE-stimulated RAW 264.7 macrophages via inhibiting the NF- $\kappa$ B pathway	2022	Biomedicine and Pharmacotherapy	149			
818	Ahmad M.N., Nadeem S., Javed M., Iqbal S., Hassan S., Khan M., Alsaab H.O., Awwad N.S., Ibrahium H.A., Mohyuddin A.	Photocatalytic Degradation of Yellow-50 Using ZnO/Polyorthoethylaniline Nanocomposites	2022	JOM	74	5	2106	2112
819	Irshad M.A., Shakoor M.B., Nawaz R., Yasmeen T., Arif M.S., Rizwan M., Rehman M.Z.U., Ahmad S.R., Latif M., Nasim I., Ali S.	Green and eco-friendly synthesis of TiO <sub>2</sub> nano particles and their application for removal of cadmium from wastewater: reaction kinetics study	2022	Zeitschrift fur Physikalische Chemie	236	5	637	657

820	Ashraf K., Pasha I., Zaman Q.U., Nazir A., Iqbal M.	Quantification of antioxidant potential of baked and fried multigrain food material as a tool for nutritional optimization strategy	2022	Biocatalysis and Agricultural Biotechnology	41			
821	Perveen S., Nadeem R., Rehman S.U., Afzal N., Anjum S., Noreen S., Saeed R., Amami M., Al-Mijalli S.H., Iqbal M.	Green synthesis of iron (Fe) nanoparticles using <i>Plumeria obtusa</i> extract as a reducing and stabilizing agent: Antimicrobial, antioxidant and biocompatibility studies	2022	Arabian Journal of Chemistry	15	5		
822	Zara R., Rasul A., Sultana T., Jabeen F., Selamoglu Z.	Identification of <i>Macrolepiota procera</i> extract as a novel G6PD inhibitor for the treatment of lung cancer	2022	Saudi Journal of Biological Sciences	29	5	3372	3379
823	Hussain S., Asrar M., Rasul A., Sultana S., Saleem U.	Chenopodium album extract ameliorates carbon tetrachloride induced hepatotoxicity in rat model	2022	Saudi Journal of Biological Sciences	29	5	3408	3413
824	Khan R.U., Naz S., Raziq F., Qudratullah Q., Khan N.A., Laudadio V., Tufarelli V., Ragni M.	Prospects of organic acids as safe alternative to antibiotics in broiler chickens diet	2022	Environmental Science and Pollution Research	29	22	32594	32604
825	Raza A., Ijaz U., Ishfaq M.K., Ahmad S., Liaqat M., Anwar F., Iqbal A., Sharif M.S.	Intelligent reflecting surface-assisted terahertz communication towards B5G and 6G: State-of-the-art	2022	Microwave and Optical Technology Letters	64	5	858	866

826	Shah A.A., Riaz L., Siddiqui M.H., Nazar R., Ahmed S., Yasin N.A., Ali A., Mukherjee S., Hussaan M., Javad S., Chaudhry O.	Spermine-mediated polyamine metabolism enhances arsenic-stress tolerance in <i>Phaseolus vulgaris</i> by expression of zinc-finger proteins related genes and modulation of mineral nutrient homeostasis and antioxidative system	2022	Environmental Pollution	300			
827	Farooq S., Yasmeen T., Niaz A., Rizwan M., Ali S.	Rice straw biochar in combination with farmyard manure mitigates bromoxynil toxicity in wheat ( <i>Triticum aestivum</i> L.)	2022	Chemosphere	295			
828	Faisal S., Tutz G.	Nearest neighbor imputation for categorical data by weighting of attributes	2022	Information Sciences	592	306	319	
829	Ali S., Bani Mfarrej M.F., Hussain A., Akram N.A., Rizwan M., Wang X., Maqbool A., Nafees M., Ali B.	Zinc fortification and alleviation of cadmium stress by application of lysine chelated zinc on different varieties of wheat and rice in cadmium stressed soil	2022	Chemosphere	295			
830	Kamal G.M., Rehmani M.N., Iqbal S.Z., Uddin J., Nazir S., Rehman J.U., Hussain A.I., Mousavi Khaneghah A.	The determination of potentially toxic elements (PTEs) in milk from the Southern Cities of Punjab, Pakistan: A health risk assessment study	2022	Journal of Food Composition and Analysis	108			

831	Awan S.A., Khan I., Rizwan M., Ali Z., Ali S., Khan N., Arumugam N., Almansour A.I., Ilyas N.	A new technique for reducing accumulation, transport, and toxicity of heavy metals in wheat ( <i>Triticum aestivum L.</i> ) by bio-filtration of river wastewater	2022	Chemosphere	294			
832	Song Y.-Q., Waqas H., Al-Khaled K., Farooq U., Gouadria S., Imran M., Khan S.U., Khan M.I., Qayyum S., Shi Q.-H.	Aspects of thermal diffusivity and melting phenomenon in Carreau nanofluid flow confined by nonlinear stretching cylinder with convective Marangoni boundary constraints	2022	Mathematics and Computers in Simulation	195		138	150
833	Perveen S., Parveen A., Saeed M., Arshad R., Zafar S.	Interactive effect of glycine, alanine, and calcium nitrate Ca(NO <sub>3</sub> ) <sub>2</sub> on wheat ( <i>Triticum aestivum L.</i> ) under lead (Pb) stress	2022	Environmental Science and Pollution Research	29	25	37954	37968
834	Khan I., Luo M., Khan S., Asghar H., Saeed M., Khan S., Khan A., Humayun M., Guo L., Shi B.	Green synthesis of SrO bridged LaFeO <sub>3</sub> /g-C <sub>3</sub> N <sub>4</sub> nanocomposites for CO <sub>2</sub> conversion and bisphenol A degradation with new insights into mechanism	2022	Environmental Research	207			
835	Habib N., Akram W., Adeel S., Amin N., Hosseinezhad M., Haq E.	Environmental-friendly extraction of Peepal ( <i>Ficus Religiosa</i> ) bark-based reddish brown tannin natural dye for silk coloration	2022	Environmental Science and Pollution Research	29	23	35048	35060

836	Batool F., Adeel S., Iqbal N., Azeem M., Hussaan M.	Sustainable natural coloring potential of bitter gourd ( <i>Momordica charantia L.</i> ) residues for cotton dyeing: innovative approach towards textile industry	2022	Environmental Science and Pollution Research	29	23	34974	34983
837	Kausar R., Azhar Khan M., Gulbadan S., Junaid M., Hussain A., Manzoor A., Somaily H.H., Attia M.S., Amin M.A.	Investigation into the structural and magnetic features of nickel doped U-type hexaferrites prepared through sol-gel method	2022	Journal of Magnetism and Magnetic Materials	549			
838	Shahzadi I., Yaseen M.R., Iqbal Khan M.T., Amjad Makhdum M.S., Ali Q.	The nexus between research and development, renewable energy and environmental quality: Evidence from developed and developing countries	2022	Renewable Energy	190		1089	1099
839	Adeel S., Kiran S., Abbas M., Batool F., Hussaan M., Amin N.	Sustainable isolation of licorice ( <i>Glycyrrhiza glabra L.</i> )-based yellow natural colorant for dyeing of bio-mordanted cotton	2022	Environmental Science and Pollution Research	29	21	31270	31277
840	Adeel S., Habib N., Batool F., Amin N., Ahmad T., Arif S., Hussaan M.	Environmental friendly exploration of cinnamon bark ( <i>Cinnamomum verum</i> ) based yellow natural dye for green coloration of bio-mordanted wool fabric	2022	Environmental Progress and Sustainable Energy	41	3		
841	Assani S., Mansoor M.S., Asghar F., Li Y., Yang F.	EFFICIENCY, RTS, AND MARGINAL RETURNS FROM SALARY ON THE PERFORMANCE OF THE NBA PLAYERS: A PARALLEL DEA NETWORK WITH SHARED INPUTS	2022	Journal of Industrial and Management Optimization	18	3	2001	2016

842	Ashfaq M., Munawar K.S., Bogdanov G., Ali A., Tahir M.N., Ahmed G., Ramalingam A., Alam M.M., Imran M., Sambandam S., Munir B.	Single crystal inspection, Hirshfeld surface investigation and DFT study of a novel derivative of 4-fluoroaniline: 4-((4-fluorophenyl)amino)-4-oxobutanoic acid (BFAOB)	2022	Journal of the Iranian Chemical Society	19	5	1953	1961
843	Waqas H., Farooq U., Alghamdi M., Muhammad T.	Significance of melting process in magnetized transport of hybrid nanofluids: A three-dimensional model	2022	Alexandria Engineering Journal	61	5	3949	3957
844	Masood S.A., Maheen S., Khan H.U., Zafar M.N., Shafqat S.S., Mujtaba M.A., ur Rehman A., Abbas G., Mahmood M.H.R., Bashir S., Yunus Khan T.M., Khalifa A.S.	In vitro/in vivo evaluation of statistically engineered alginate scaffold reinforced with dual drugs loaded silica nanoparticles for enhanced fungal therapeutics	2022	Alexandria Engineering Journal	61	5	4041	4056
845	Waqas H., Farooq U., Muhammad T., Manzoor U.	Importance of shape factor in Sisko nanofluid flow considering gold nanoparticles	2022	Alexandria Engineering Journal	61	5	3665	3672
846	Xiong P.-Y., Nazeer M., Hussain F., Ijaz Khan M., Saleem A., Qayyum S., Chu Y.-M.	Two-phase flow of couple stress fluid thermally effected slip boundary conditions: Numerical analysis with variable liquids properties	2022	Alexandria Engineering Journal	61	5	3821	3830
847	Hussain S.M., Hanif S., Sharif A., Bashir F., Iqbal	Unrevealing the Sources and Catalytic Functions of Phytase with Multipurpose Characteristics	2022	Catalysis Letters	152	5	1358	1371

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848	Nazeer M., Ahmad F., Ali W., Ijaz Khan M., Saleem A., Khaliq Z., Kadry S., Chu Y.-M.	Perturbation and numerical solutions of non-Newtonian fluid bounded within in a porous channel: Applications of pseudo-spectral collocation method	2022	Numerical Methods for Partial Differential Equations	38	3	278	292
849	Bari M.W., Qurrah-tul-ain, Abrar M., Fanchen M.	Employees' responses to psychological contract breach: The mediating role of organizational cynicism	2022	Economic and Industrial Democracy	43	2	810	829
850	Zubair A., Baharun R., Kiran F.	Role of traditional and social media in developing consumer-based brand equity	2022	Journal of Public Affairs	22	2		
851	Anwar-ul-Haq M., Ibrahim M., Yousaf B., Al-Huqail A.A., Ali H.M.	Role of Bacterial Consortium and Synthetic Surfactants in Promoting the Phytoremediation of Crude Oil-Contaminated Soil Using Brachiaria mutica	2022	Frontiers in Energy Research	10			
852	Abbas M., Yan K., Li J., Zafar S., Hasnain Z., Aslam N., Iqbal N., Hussain S.S., Usman M., Abbas M., Tahir M., Abbas S., Abbas S.K., Qiulan H., Zhao X., El-Sappah A.H.	Agri-Nanotechnology and Tree Nanobionics: Augmentation in Crop Yield, Biosafety, and Biomass Accumulation	2022	Frontiers in Bioengineering and Biotechnology	10			

853	Javaid K., Ashfaq M., Saleem M., Amin N., Ali A., Mahmood K., Ikram S., Khalil A., Wattoo A.G., Islam A., Alzaid M., Alrobei H., Liang L., Cao H.	Structural and thermoelectric properties of nanostructured p-SnO thin films grown by e-beam evaporation method	2022	International Journal of Hydrogen Energy	47	34	15547	15555
854	Riaz M., Abbas M., Rasool G., Baig I.S., Mahmood Z., Munir N., Mahmood Tahir I., Ali Shah S.M., Akram M.	Prevalence of transfusion-transmitted infections in multiple blood transfusion-dependent thalassemic patients in Asia: A systemic review	2022	International Journal of Immunopathology and Pharmacology	36			
855	Sheikh M.F., Bhutta A.I., Rehman B., Bazil M., Hassan A.	Corporate social responsibility and dividend policy: a strategic choice in family firms	2022	Journal of Family Business Management	12	2	296	315
856	Bilal B., Niazi R., Nadeem S., Farid M.A., Nazir M.S., Akhter T., Javed M., Mohyuddin A., Rauf A., Ali Z., Naqvi S.A.R., Muhammad N., Elkaeed E.B., Ibrahium H.A., Awwad N.S., Hassan S.U.	Fabrication of Guided Tissue Regeneration Membrane Using Lignin-Mediated ZnO Nanoparticles in Biopolymer Matrix for Antimicrobial Activity	2022	Frontiers in Chemistry	10			

857	Farrukh M., Saleem U., Ahmad B., Chauhdary Z., Alsharif I., Manan M., Qasim M., Alhasani R.H., Shah G.M., Shah M.A.	Sarcococca saligna Hydroalcoholic Extract Ameliorates Arthritis in Complete Freund's Adjuvant-Induced Arthritic Rats via Modulation of Inflammatory Biomarkers and Suppression of Oxidative Stress Markers	2022	ACS Omega	7	15	13164	13177
858	Imran M.S., Javed T., Areej I., Haider M.N.	Sequestration of crystal violet dye from wastewater using low-cost coconut husk as a potential adsorbent	2022	Water Science and Technology	85	8	2295	2317
859	Naz A., Aldaghfag S.A., Yaseen M., Butt M.K., Kashif M., Zahid M., Mubashir S., Somaily H.H.	Investigation of Ce doped BaTiO <sub>3</sub> compound for optoelectronic devices	2022	Physica B: Condensed Matter	631			
860	Kamal S., Rehman S., Rehman K., Ghaffar A., Bibi I., Ahmed T., Maqsood S., Nazish N., Iqbal H.M.N.	Sustainable and optimized bioethanol production using mix microbial consortium of <i>Saccharomyces cerevisiae</i> and <i>Candida cantarelli</i>	2022	Fuel	314			
861	Irshad M.K., Noman A., Wang Y., Yin Y., Chen C., Shang J.	Goethite modified biochar simultaneously mitigates the arsenic and cadmium accumulation in paddy rice ( <i>Oryza sativa</i> ) L	2022	Environmental Research	206			

862	Khera E.A., Mahata C., Imran M., Niaz N.A., Hussain F., Khalil R.M.A., Rasheed U., Sungjun Kim N.	Improved resistive switching characteristics of a multi-stacked HfO <sub>2</sub> /Al <sub>2</sub> O <sub>3</sub> /HfO <sub>2</sub> RRAM structure for neuromorphic and synaptic applications: experimental and computational study	2022	RSC Advances	12	19	11649	11656
863	Saleem M.H., Wang X., Parveen A., Perveen S., Mehmood S., Fiaz S., Ali S., Hussain S., Adnan M., Iqbal N., Alatawi A., Ali S.	Alleviation of drought stress by root-applied thiourea is related to elevated photosynthetic pigments, osmoprotectants, antioxidant enzymes, and tubers yield and suppressed oxidative stress in potatoes cultivars	2022	PeerJ	10			
864	Jiatong W., Wang Z., Alam M., Murad M., Gul F., Gill S.A.	The Impact of Transformational Leadership on Affective Organizational Commitment and Job Performance: The Mediating Role of Employee Engagement	2022	Frontiers in Psychology	13			
865	Haq I.U., Raja U., Alam I., De Clercq D., Saleem S.	Servant leadership and mistreatment at the workplace: mediation of trust and moderation of ethical climate	2022	Personnel Review	51	3	1061	1084
866	Malik A.N., Kuznetsov A., Ali A., Ashfaq M., Tahir M.N., Siddique A.	Imine-based Zwitterion: Synthesis, single-crystal characterization, and computational investigation	2022	Journal of Molecular Structure	1253			

	Jamil K., Dunnan L., Awan F.H., Jabeen G., Gul R.F., Idrees M., Mingguang L.	Antecedents of Consumerâ€™s Purchase Intention Towards Energy-Efficient Home Appliances: An Agenda of Energy Efficiency in the Post COVID-19 Era	2022	Frontiers in Energy Research	10			
867	Hossain S., Yousaf M., Liu Y., Chang D., Zhou X.	An Overview of the Evidence and Mechanism of Drugâ€“Herb Interactions Between Propolis and Pharmaceutical Drugs	2022	Frontiers in Pharmacology	13			
868	Shaheen G., Ashfaq A., Khawar A., Jamil Q.A., Parveen R., Hadi F., Ghauri A.O., Shirazi J.H., Asif H.M., Shamim T., Sumreen L., Ali T., Akram M., Noor R., Mehmood A., Sajid F.	Fourier transform infrared spectrometer analysis and antimicrobial screening of ethanolic extract of Operculina terpathum from cholistan desert	2022	Pharmacy Practice	20	2		
869	Aisha A., Zahra S., Tahir I.M., Hussain A., Bano N., Roobi A., Afsheen N., Saleem Y.	Anticancer L-Asparaginase and Phytoactive Compounds From Plant Solanum nigrum Against MDR (Methicillin drug resistant) Staphylococcus aureus and Fungal Isolates	2022	Dose-Response	20	2		
870	Ain Javed Q.U., Syed M.A., Arshad R., Rahdar A., Irfan M., Raza S.A., Shahnaz G., Hanif S., DÃ©ez-Pascual A.M.	Evaluation and Optimization of Prolonged Release Mucoadhesive Tablets of Dexamethasone for Wound Healing: In Vitroâ€“In Vivo Profiling in Healthy Volunteers	2022	Pharmaceutics	14	4		
871								

872	Akhtar R., Noreen R., Raza Z., Rasul A., Zahoor A.F.	Synthesis, Anticancer Evaluation, and In Silico Modeling Study of Some N-Acylated Ciprofloxacin Derivatives	2022	Russian Journal of Organic Chemistry	58	4	541	548
873	Khalid M.F., Rehman K., Irshad K., Chohan T.A., Akash M.S.H.	Biochemical Investigation of Inhibitory Activities of Plant-Derived Bioactive Compounds Against Carbohydrate and Glucagon-Like Peptide-1 Metabolizing Enzymes	2022	Dose-Response	20	2		
874	Iqbal A., Shafique M., Zahoor M.A., Muzammil S., Nawaz Z., Jabbar A., Khurshid M., Hussain R., Islam A., Almatroudi A., Allemailem K.S., Rasool M.H., Aslam B.	The occurrence of multidrug-resistant <i>Mycobacterium tuberculosis</i> from patients of pulmonary tuberculosis	2022	Journal of Infection in Developing Countries	16	4	698	704
875	Hussain M., Khadimallah M.A., Ayed H., Alshoaibi A., Loukil H., Alsuruji G., Tounsi A.	Actual fatigue reliability of structural material: Vibration efficiency	2022	Advances in Concrete Construction	13	4	327	337
876	Hussain M., Asghar S., Ayed H., Khadimallah M.A., Alshoaibi A., Tounsi A.	Structural detection of variation in Poisson's ratio: Monitoring system for zigzag double walled carbon nanotubes	2022	Advances in Nano Research	12	4	345	352

877	Shahbaz F., Akhter N., Shahid M., Riaz M., Anjum F., Hussain F.	Ultrasound Assisted Extraction and Characterization of Bioactives From <i>Verbascum thapsus</i> Roots to Evaluate Their Antioxidant and Medicinal Potential	2022	Dose-Response	20	2		
878	Inam S., Irfan M., Lali N.U.A., Syed H.K., Asghar S., Khan I.U., Khan S.-U.-D., Iqbal M.S., Zaheer I., Khames A., Abou-Taleb H.A., Abourehab M.A.S.	Development and Characterization of Eudragit® EPO-Based Solid Dispersion of Rosuvastatin Calcium to Foresee the Impact on Solubility, Dissolution and Antihyperlipidemic Activity	2022	Pharmaceuticals	15	4		
879	Al Jabri H., Saleem M.H., Rizwan M., Hussain I., Usman K., Alsafran M.	Zinc Oxide Nanoparticles and Their Biosynthesis: Overview	2022	Life	12	4		
880	Nisar J., Shah S.M.A., Akram M., Ayaz S., Rashid A.	Phytochemical Screening, Antioxidant, and Inhibition Activity of <i>Picrorhiza kurroa</i> Against $\alpha$ -Amylase and $\beta$ -Glucosidase	2022	Dose-Response	20	2		
881	Hassan S.U., Khalid I., Hussain L., Barkat K., Khan I.U.	Development and Evaluation of pH-Responsive Pluronic F 127 Co-Poly- (Acrylic Acid) Biodegradable Nanogels for Topical Delivery of Terbinafine HCL	2022	Dose-Response	20	2		

	Du H., Donat M.G., Zong S., Alexander L.V., Manzanas R., Kruger A., Choi G., Salinger J., He H.S., Li M.-H., Fujibe F., Nandintsetseg B., Rehman S., Abbas F., Rusticucci M., Srivastava A., Zhai P., Lippmann T., Yabi I., Stambaugh M.C., Wang S., Batbold A., de Oliveira P.T., Adrees M., Hou W., Santos e Silva C.M., Lucio P.S., Wu Z.	Extreme Precipitation on Consecutive Days Occurs More Often in a Warming Climate	2022	Bulletin of the American Meteorological Society	103	4	E1130	E1145
882	Bakht M.P., Salam Z., Bhatti A.R., Sheikh U.U., Khan N., Anjum W.	Techno-economic modelling of hybrid energy system to overcome the load shedding problem: A case study of Pakistan	2022	PLoS ONE	17	45386		
883	Saadullah M., Asif M., Farid A., Naseem F., Rashid S.A., Ghazanfar S., Muzammal M., Ahmad S., Bin Jardan Y.A., Alshaya H., Saleem M.H., Ali S., Adetunji C.O., Arif S.	A Novel Distachionate from Breynia distachia Treats Inflammations by Modulating COX-2 and Inflammatory Cytokines in Rat Liver Tissue	2022	Molecules	27	8		

885	Batool A., Saleem M., Alamgeer, Mushtaq M.N., Alotaibi N.H., Alharbi K.S., Bukhari S.N.	The potential protective effect of the Polygonum hydropiper L against the development of fructose-induced oxidative stress and metabolic disorders in male Sprague-Dawely rats	2022	Journal of Pharmacy and Pharmacology	74	4	585	595
886	Khan H.U., Nasir F., Maheen S., Shafqat S.S., Shah S., Khames A., Ghoneim M.M., Abbas G., Shabbir S., Abdelgawad M.A., Abourehab M.A.S., Irfan A., El Sisi A.M.	Antibacterial and Wound-Healing Activities of Statistically Optimized Nitrofurazone-and Lidocaine-Loaded Silica Microspheres by the Boxâ€“Behnken Design	2022	Molecules	27	8		
887	Noor F., Rehman A., Ashfaq U.A., Saleem M.H., Okla M.K., Al-Hashimi A., Abdelgawad H., Aslam S.	Integrating Network Pharmacology and Molecular Docking Approaches to Decipher the Multi-Target Pharmacological Mechanism of Abrus precatorius L. Acting on Diabetes	2022	Pharmaceuticals	15	4		
888	Hussain M., Liaqat I., Hanif U., Sultan A., Ara C., Aftab N., Urooj, Butt A.	Medicinal Perspective of Antibacterial Bioactive Agents in Earthworms (Clitellata, Annelida): A Comprehensive Review	2022	Journal of Oleo Science	71	4	563	573
889	Nonlaopon K., Awan M.U., Javed M.Z., Budak H., Noor M.A.	Some q-Fractional Estimates of Trapezoid like Inequalities Involving Rainaâ€™s Function	2022	Fractal and Fractional	6	4		

890	Hussain S.M., Khalid M.A., Bashir F., Shahzad M.M., Hussain A.I.	IMPACT OF LYCOPENE SUPPLEMENTED CANOLA MEAL-BASED DIET ON GROWTH PERFORMANCE, NUTRIENT DIGESTIBILITY AND ANTIOXIDANT STATUS OF CATLA CATLA FINGERLINGS	2022	Journal of Animal and Plant Sciences	32	2	571	577
891	Afzal G., Jamal A., Kiran S., Mustafa G., Ahmad F., Saeed S., Ahmad H.I., Dawood S.	AERVA JAVANICA MEDIATED SYNTHESIS, CHARACTERIZATION AND ANTIMICROBIAL EVALUATION OF ZINC OXIDE NANOPARTICLES	2022	Journal of Animal and Plant Sciences	32	2	547	553
892	Hussain T., Imran M., Mushtaq Z., Khan M.I., Ahmad M.H., Mahr-Un-nisa, Khan M.K.	HEAVY METAL BIOSORPTION BY POLYPHENOL-FREE BANANA PEEL POWDER	2022	Journal of Animal and Plant Sciences	32	2	507	514
893	Bin Yousaf M.T., Nawaz M.F., Yasin G., Cheng H., Ahmed I., Gul S., Rizwan M., Rehim A., Xuebin Q., Ur Rahman S.	Determining the appropriate level of farmyard manure biochar application in saline soils for three selected farm tree species	2022	PLoS ONE	17	44655		
894	Huntul M.J., Abbas M., Iqbal M.K.	An inverse problem for investigating the time-dependent coefficient in a higher-order equation	2022	Computational and Applied Mathematics	41	3		

	Jouali R., Aoutoul M., Ouahmane H., Ahmad S., Had A., El Moukhtafi F., Parchin N.O., See C.H., Abd-Alhameed R.	Design of an Analog RFID-Based Tag Antenna with Opened Circuited L-Shaped Stubs for Applications in Localization	2022	Electronics (Switzerland)	11	7		
895	Hussain A., Zafar K., Baig A.R., Almakki R., Alsuwaidan L., Khan S.	Sensor-Based Gym Physical Exercise Recognition: Data Acquisition and Experiments	2022	Sensors	22	7		
896	Khan M.J.I., Shakeel M., Majeed I., Latif A., Ahmad J., Ullah H., Fakhar-E-Alam M., Mustansar Z., Asghar M., Abdelmohsen S.A.M.	Exploring structural, electronic, optical, magnetic, and thermoelectric properties of Pt doped and Pt-Cu/Au co-doped GaN	2022	Physica Scripta	97	4		
897	Abbasi S.A., Iqbal J., Rashid M., Akram M.A., Rehman N., Basit M.A.	Wet-chemical decoration of SiO <sub>2</sub> spheres with TiO <sub>2</sub> particles for enhanced dye degradation and solar cell performance	2022	Optical Materials	126			
898	Imran M., Kamran T., Khan S.A., Muhammad T., Waqas H.	Physical attributes of bio-convection in nanofluid flow through a paraboloid of revolution on horizontal surface with motile microorganisms	2022	International Communications in Heat and Mass Transfer	133			
899	Irshad M.K., Ibrahim M., Noman A., Shang J., Mahmood A., Mubashir M., Khoo K.S., Ng H.S.,	Elucidating the impact of goethite-modified biochar on arsenic mobility, bioaccumulation in paddy rice ( <i>Oryza sativa</i> L.) along with soil enzyme activities	2022	Process Safety and Environmental Protection	160		958	967
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901	Yasmeen T., Arif M.S., Shahzad S.M., Riaz M., Tufail M.A., Mubarik M.S., Ahmad A., Ali S., Albasher G., Shakoor A.	Abandoned agriculture soil can be recultivated by promoting biological phosphorus fertility when amended with nano-rock phosphate and suitable bacterial inoculant	2022	Ecotoxicology and Environmental Safety	234			
902	Saleem A., Mubeen A., Akhtar M.F., Zeb A.	Polystichum braunii ameliorates airway inflammation by attenuation of inflammatory and oxidative stress biomarkers, and pulmonary edema by elevation of aquaporins in ovalbumin-induced allergic asthmatic mice	2022	Inflammopharmacology	30	2	639	653
903	Akhlaq M., Ali S.W., Murtaza A., Javed M.A., Ahmad Khan A., Amir R.M.	Impact of initial grain moisture, fumigation, and storage period on physicochemical characteristics of wheat in Pakistan	2022	Journal of Food Processing and Preservation	46	4		
904	Farrukh M., Saleem U., Qasim M., Manan M., Shah M.A.	Sarcococca saligna extract attenuates formaldehyde-induced arthritis in Wistar rats via modulation of pro-inflammatory and inflammatory biomarkers	2022	Inflammopharmacology	30	2	579	597
905	Ranian K., Kashif Zahoor M., Zulhusnain M.,	CRISPR/Cas9 mediated sex-ratio distortion by sex specific gene editing in <i>Aedes aegypti</i>	2022	Saudi Journal of Biological Sciences	29	4	3015	3022

	Ahmad A.							
906	Rashid S., Jarad F., Ahmad A.G., Abualnaja K.M.	New numerical dynamics of the heroin epidemic model using a fractional derivative with Mittag-Leffler kernel and consequences for control mechanisms	2022	Results in Physics	35			
907	Rashid S., Jarad F., Ahmad A.G.	A novel fractal-fractional order model for the understanding of an oscillatory and complex behavior of human liver with non-singular kernel	2022	Results in Physics	35			
908	Ashfaq A., Jacob J., Amami M., Al-Harbi F.F., Ali A., Mahmood K., Rehman U., Amin N., Ikram S., Akbar S.T., Hussain S.	Effect of Al-doping on the thermoelectric properties of CZTS thin film grown by sol-gel method	2022	Solid State Communications	345			
909	Asif M., Yousaf H.M., Saleem M., Hussain L., Mahrukh, Al Zarzour R., Chohan T., Saadullah M., Shamas M.U., Yaseen H.S., Yousaf M.U., Khan I.U., Tahir M.A.	Raphanus sativus Seeds Oil Arrested in vivo Inflammation and Angiogenesis through Down-regulation of TNF- $\alpha$	2022	Current Pharmaceutical Biotechnology	23	5	728	739

910	Khan A., Rehman H.U., Habib U., Ijaz U.	m6A-Finder: Detecting m6A methylation sites from RNA transcriptomes using physical and statistical properties based features	2022	Computational Biology and Chemistry	97				
911	Saeed M., Alwadai N., Ben Farhat L., Baig A., Nabgan W., Iqbal M.	Co3O4-Bi2O3 heterojunction: An effective photocatalyst for photodegradation of rhodamine B dye	2022	Arabian Journal of Chemistry	15	4			
912	Idrees A., Shan A., Zaman W.Q., Mohsin A., Abbas Z., Shahzad T., Shakeel A., Lyu S.	Efficient catalytic degradation of trichloroethylene in persulfate system by Ca-Fe2O3 and Cu-Fe2O3 nanoparticles: Mechanistic insights	2022	Journal of Environmental Chemical Engineering	10	2			
913	Alam M.A., Wan C., Tran D.T., Mofijur M., Ahmed S.F., Mehmood M.A., Shaik F., Vo D.-V.N., Xu J.	Microalgae binary culture for higher biomass production, nutrients recycling, and efficient harvesting: a review	2022	Environmental Chemistry Letters	20	2	1153	1168	
914	Khan M.I., Bouyahya A., Hachlafi N.E.L., Meniyi N.E., Akram M., Sultana S., Zengin G., Ponomareva L., Shariati M.A., Ojo O.A., Dallâ€™Acqua S., Elebiyo T.C.	Anticancer properties of medicinal plants and their bioactive compounds against breast cancer: a review on recent investigations	2022	Environmental Science and Pollution Research	29	17	24411	24444	

915	Arshad M., Asmatullah, Shafiq Ahmed M., Shafiq ahmed K., Makhdoom Hussain S., Hussain N.	Monitoring of level of mean concentration and toxicity equivalence (TEQ) of polychlorinated biphenyls (PCBs) in selected vegetables, beans and grains in khanewal and multan, Pakistan	2022	Saudi Journal of Biological Sciences	29	4	2787	2793
916	Chen J., Yang F., Liu Y., Usman A.	The asymmetric effect of technology shocks on CO2 emissions: a panel analysis of BRICS economies	2022	Environmental Science and Pollution Research	29	18	27115	27123
917	Khan F., Shahid A., Zhu H., Wang N., Javed M.R., Ahmad N., Xu J., Alam M.A., Mehmood M.A.	Prospects of algae-based green synthesis of nanoparticles for environmental applications	2022	Chemosphere	293			
918	Ahmad M.N., Zia A., van den Berg L., Ahmad Y., Mahmood R., Dawar K.M., Alam S.S., Riaz M., Ashmore M.	Effects of soil fluoride pollution on wheat growth and biomass production, leaf injury index, powdery mildew infestation and trace metal uptake	2022	Environmental Pollution	298			
919	Shamshir F., Abbas G., Amjad M., Rizwan M., Akram M., Ahmad S., Tahir M., Ali S., Farooq A.B.U.	Physiological and biochemical characterization of Kalongi ( <i>Nigella sativa</i> ) against arsenic stress: Implications for human health risk assessment	2022	Environmental Pollution	298			
920	Ahmad U.S., Usman M., Hussain S., Jahanger A.,	Determinants of renewable energy sources in Pakistan: An overview	2022	Environmental Science and Pollution Research	29	19	29183	29201

	Abrar M.							
921	Liu D., Xie Y., Hafeez M., Usman A.	The trade-off between economic performance and environmental quality: does financial inclusion matter for emerging Asian economies?	2022	Environmental Science and Pollution Research	29	20	29746	29755
922	Ramzan M., Iqbal H.A., Usman M., Ozturk I.	Environmental pollution and agricultural productivity in Pakistan: new insights from ARDL and wavelet coherence approaches	2022	Environmental Science and Pollution Research	29	19	28749	28768
923	Ali H.T., Amami M., Rehman U., Mahmood K., Yusuf M., Ikram S., Ali A., Amin N., Javaid K., Imran Arshad M.	Investigating the thermoelectric power generation performance of ZnCuO: A p-type mixed-metal oxide system	2022	Journal of Physics and Chemistry of Solids	163			
924	Mukhtar A., Saqib S., Lin H., Hassan Shah M.U., Ullah S., Younas M., Rezakazemi M., Ibrahim M., Mahmood A., Asif S., Bokhari A.	Current status and challenges in the heterogeneous catalysis for biodiesel production	2022	Renewable and Sustainable Energy Reviews	157			
925	Abbas A., Ahmad M.S.A., Ashraf M., Ali Q., Alvi A.K.	Role of antioxidative defense system in amelioration of cadmium-induced phytotoxic effects in germinating seeds of maize ( <i>Zea mays</i> )	2022	Crop and Pasture Science	73	5	599	613

926	Asif M., Mocanu I.D., Abdullah U., HÄ¶hne W., AltmÄ¶ller J., Makhdoom E.U.H., Thiele H., Baig S.M., NÄ¶rnberg P., Graul-Neumann L., Hussain M.S.	A novel missense variant of SCN4A co-segregates with congenital essential tremor in a consanguineous Kurdish family	2022	American Journal of Medical Genetics, Part A	188	4	1251	1258
927	Shaheen S., Sharifi-Rad J., Ali M., Shamim Z., Rasool B., Ashfaq M., Mukhtar H., Harun N., Hanif U., Siddique R.	Light and scanning electron microscopy-based foliar morpho-anatomical comparison of selected family Rosaceae members distributed in District Lahore, Punjab, Pakistan	2022	Microscopy Research and Technique	85	4	1597	1610
928	Hayat T., Adeel S., Fazal-ur-Rehman, Batool F., Amin N., Ahmad T., Ozomay M.	Waste black tea leaves ( <i>Camelia sinensis</i> ) as a sustainable source of tannin natural colorant for bio-treated silk dyeing	2022	Environmental Science and Pollution Research	29	16	24035	24048
929	Tabash M.I., Farooq U., Ashfaq K., Tiwari A.K.	Economic policy uncertainty and financing structure: A new panel data evidence from selected Asian economies	2022	Research in International Business and Finance	60			
930	Farooq U., Waqas H., Muhammad T., Khan S.A.	Heat transfer enhancement of hybrid nanofluids over porous cone	2022	International Journal of Chemical Reactor Engineering	20	4	465	473

931	Kong H.-Y., Zhu H., Zhou R., Akram N.A., Wang Y.-B., Jiao C.-J., Xiong Y.-C.	Role of abscisic acid in modulating drought acclimation, agronomic characteristics and $\text{^2-N-oxalyl-L-}^{\pm,\text{^2-}}$ -diaminopropionic acid ( $\text{^2-ODAP}$ ) accumulation in grass pea ( <i>Lathyrus sativus L.</i> )	2022	Journal of the Science of Food and Agriculture	102	6	2553	2562
932	Waqas H., Muhammad T., Bukhari F.F., Farooq U., Alqarni M.S.	Nonlinear radiative transport of hybrid nanofluids due to moving sheet with entropy generation	2022	International Journal of Chemical Reactor Engineering	20	4	423	431
933	Abbas Q., Kanwal U., Saeed W., Khan M.U., Shahzadi M., Faran M.	Relationship of Muslim Religiosity and Death Anxiety with the Mediating Effect of Optimism and Depression Among Cancer Patients in Pakistan	2022	Journal of Religion and Health	61	2	1418	1436
934	Waqas H., Khan S.A., Muhammad T., Yasmin S.	Convective heat transfer in magnetized flow of nanofluids between two rotating parallel disks	2022	International Journal of Chemical Reactor Engineering	20	4	411	422
935	Waqas H., Ali Khan S., Muhammad T.	Thermal analysis of magnetized flow of AA7072-AA7075/blood-based hybrid nanofluids in a rotating channel	2022	Alexandria Engineering Journal	61	4	3059	3068
936	Hui H., Esmaeili E., Tayebi R., He Q., Abbaspour S., Akram M., Jalili Z., Mahdizadeh N., Ahmadi A.	Biosynthesis, characterization, and application of Cu <sub>2</sub> O nanoparticles originated from <i>Cressa</i> leaf extract as an efficient green catalyst in the synthesis of some chromenes	2022	Journal of the Iranian Chemical Society	19	4	1261	1270

937	Rafique M.Z., Nadeem A.M., Xia W., Ikram M., Shoaib H.M., Shahzad U.	Does economic complexity matter for environmental sustainability? Using ecological footprint as an indicator	2022	Environment, Development and Sustainability	24	4	4623	4640
938	Alqarni M.S., Waqas H., Alghamdi M., Muhammad T.	Importance of bioconvection in 3D viscoelastic nanofluid flow due to exponentially stretching surface with nonlinear radiative heat transfer and variable thermal conductivity	2022	Journal of Thermal Analysis and Calorimetry	147	7	4805	4819
939	Nadeem Anjam Y., Ali A.	On singularities of solution of the elasticity system in a bounded domain with angular corner points	2022	Mathematical Methods in the Applied Sciences	45	5	3124	3143
940	Iqbal S., Nadeem S., Ahmad M.N., Javed M., Alsaab H.O., Awwad N.S., Ibrahium H.A., Elkaeed E.B., Alshammari F.H., Alwadai N., Alahmdi M.I., Bahadur A., Hassan S.U., Mohyuddin A.	Fabrication of Poly(o-Chloroaniline) to MMT Clay as Potential Flame-Resistant Material	2022	Frontiers in Materials	9			
941	Awan S.A., Khan I., Tariq R., Rizwan M., Wang X., Zhang X., Huang L.	Genome-Wide Expression and Physiological Profiling of Pearl Millet Genotype Reveal the Biological Pathways and Various Gene Clusters Underlying Salt Resistance	2022	Frontiers in Plant Science	13			

942	Munawar T., Mukhtar F., Nadeem M.S., Manzoor S., Ashiq M.N., Mahmood K., Batool S., Hasan M., Iqbal F.	Fabrication of dual Z-scheme TiO <sub>2</sub> -WO <sub>3</sub> -CeO <sub>2</sub> heterostructured nanocomposite with enhanced photocatalysis, antibacterial, and electrochemical performance	2022	Journal of Alloys and Compounds	898			
943	Wang J., Chen Z., He F., Lee T., Cai W., Chen W., Miao N., Zeng Z., Hussain G., Yang Q., Guo Q., Sun T.	Single-Cell Transcriptomics of Cultured Amniotic Fluid Cells Reveals Complex Gene Expression Alterations in Human Fetuses With Trisomy 18	2022	Frontiers in Cell and Developmental Biology	10			
944	Ashfaq M., Khalid M., Tahir M.N., Ali A., Arshad M.N., Asiri A.M.	Synthesis of Crystalline Fluoro-Functionalized Imines, Single Crystal Investigation, Hirshfeld Surface Analysis, and Theoretical Exploration	2022	ACS Omega	7	11	9867	9878
945	Junaid H.M., Waseem M.T., Khan Z.A., Munir F., Sohail S., Farooq U., Shahzad S.A.	Fluorenone-Based Fluorescent and Colorimetric Sensors for Selective Detection of I-Ions: Applications in HeLa Cell Imaging and Logic Gate	2022	ACS Omega	7	11	9730	9742
946	Hussain R., Guangbin Z., Abbas R.Z., Siddique A.B., Mohiuddin M., Khan I., Rehman T.U., Khan A.	Clostridium perfringens Types A and D Involved in Peracute Deaths in Goats Kept in Cholistan Ecosystem During Winter Season	2022	Frontiers in Veterinary Science	9			

947	Sadaf T., Kousar R., Mohy Ul Din Z., Abbas Q., Makhdum M.S.A., Nasir J.	Cotton production for the sustainable livelihoods in Punjab Pakistan: a case study of district Muzaffargarh	2022	International Journal of Ethics and Systems	38	2	191	208
948	Rehman A., Irfan M., Hameed A., Saif M.J., Qayyum M.A., Farooq T.	Chemical-Free Dyeing of Cotton With Functional Natural Dye: A Pollution-Free and Cleaner Production Approach	2022	Frontiers in Environmental Science	10			
949	Ali M., Wang X., Haroon U., Chaudhary H.J., Kamal A., Ali Q., Saleem M.H., Usman K., Alatawi A., Ali S., Hussain Munis M.F.	Antifungal activity of Zinc nitrate derived nano Zno fungicide synthesized from <i>Trachyspermum ammi</i> to control fruit rot disease of grapefruit	2022	Ecotoxicology and Environmental Safety	233			
950	Malik S., Shahid A., Betenbaugh M.J., Liu C.-G., Mehmood M.A.	A novel wastewater-derived cascading algal biorefinery route for complete valorization of the biomass to biodiesel and value-added bioproducts	2022	Energy Conversion and Management	256			
951	Shahazidy U., Asghar Jamal M., Muneer M., Naseem B., Kaleem Qureshi A.	Elucidation of molecular interactions between sugar alcohol and dimethyl sulfoxide in aqueous system: Volumetric and acoustic study	2022	Journal of Molecular Liquids	350			

952	Ibrahim M., Latif A., Ahmad M., Ahmad S., Ali A., Siddique A.B., Saadiq M., Akbar N., farooq U., Khan A., Al-Harrasi A., Ali M.	Sulfonylbis(acylhydrazones) as anticholinesterase inhibitors: Synthesis, in vitro biological evaluation and computational studies	2022	Journal of Molecular Structure	1252			
953	Zeenat, Maryum Javed S., Ahmad Z., Ahmed S., Iqbal S., Naqvi I.J., Usman M., Ashiq M.N., Elnaggar A.Y., El-Bahy Z.M.	Highly dispersed active sites of Ni nanoparticles onto hierarchical reduced graphene oxide architecture towards efficient water oxidation	2022	Fuel	312			
954	Nazir M.M., Li Q., Noman M., Ulhassan Z., Ali S., Ahmed T., Zeng F., Zhang G.	Calcium Oxide Nanoparticles Have the Role of Alleviating Arsenic Toxicity of Barley	2022	Frontiers in Plant Science	13			
955	Rashid M.A.R., Atif R.M., Zhao Y., Azeem F., Ahmed H.G.M.-D., Pan Y., Li D., Zhao Y., Zhang Z., Zhang H., Li J., Li Z.	Dissection of genetic architecture for tiller angle in rice ( <i>Oryza sativa</i> . L) by multiple genome-wide association analyses	2022	PeerJ	10			
956	Gulzar M.A., Latif W., Abid M., Nazir H.Z., Riaz M.	On enhanced exponential-cum-ratio estimators using robust measures of location	2022	Concurrency and Computation: Practice and Experience	34	6		

957	Hong J., Gill S.A., Javaid H., Ali Q., Murad M., Shafique M.	Hunting the Best Opportunity Through the Arrow of General Decision-Making Styles: Unfolding the Role of Social Capital and Entrepreneurial Intention	2022	Frontiers in Psychology	13			
958	Ashar A., Bhatti I.A., Mohsin M., Yousaf M., Aziz H., Gul A., Hussain T., Bhutta Z.A.	Enhanced Solar Photocatalytic Activity of Thermally Stable I:ZnO/Glass Beads for Reduction of Cr(VI) in Tannery Effluent	2022	Frontiers in Chemistry	10			
959	Anwar H., Abbas B., Mustafa A., Anjum F., Ahmad F., Naz I.	Investigation of Doping Effect on Structural, Optical, Antibacterial, and Toxicity Properties of Iron Doped Copper Oxide Nanostructures Prepared by Co-Precipitation Route	2022	Iranian Journal of Chemistry and Chemical Engineering	41	3	777	786
960	Ali H.T., Ashfaq A., Sharafat Hussain M., Mahmood K., Yusuf M., Ikram S., Ali A., Amin N., Javaid K., Yasir Ali M., Jacob J., Amami M.	Enhancing the thermoelectric properties of CZTS thin films grown on multi-crystalline Si substrate by controlling the sulfurization time duration	2022	Optoelectronics and Advanced Materials, Rapid Communications	16	45355	164	168
961	Saadullah M., Asif M., Uzair M., Afzal S., Rashid S.A., Rashad M., Bashir R., Mahmood S., Batool J.A.	Pharmacological evaluation of the hypoglycemic and antiAlzheimer's activities of aerial parts of Breynia distachia (Phyllanthaceae)	2022	Tropical Journal of Pharmaceutical Research	21	3	579	587

962	Yahya A., Hussain M., Khadimallah M.A., Khedher K.M., Al-Basyouni K.S., Ghandourah E., Banoqitah E.M., Alshoaibi A.	A system of several fraction laws for the identification of rotating response of FG shell	2022	Advances in Concrete Construction	13	3	223	231
963	Ghamkhar M., Harbaoui I., Hussain M., Ayed H., Khadimallah M.A., Alshoaibi A.	Structural monitoring of layered FGM distribution ring support: Analysis with and without internal pressure	2022	Advances in Nano Research	12	3	337	344
964	Sharif H., Naeem M.N., Khadimallah M.A., Ayed H., Hussain M., Alshoaibi A.	The strongest control of thermophoresis coefficient on nanoparticle profile at intermediate gaps: A spinning sphere	2022	Computers and Concrete	29	3	201	207
965	Mujtaba N., Jahan N., Naqvi S.A.R., Kiran S., Sultana B., Zia M.A.	Isolation and characterization of novel antihypertensive bioactive peptides from brassica napus and angiotensin-converting enzyme (ace) inhibition potential	2022	Pakistan Journal of Pharmaceutical Sciences	35	2	635	640
966	Nayila I., Javed M.S., Khan M.A., Hussain G., Naqvi S.A.R., Ali S., Jabeen Z., Shahnawaz S., Akram R., Iman T., Zahoor-Ul Hassan Dogar M., Malik S.A.	Vitamin C supplementation ameliorates liver function profile and antiviral treatment response in Hepatitis C patients	2022	Pakistan Journal of Pharmaceutical Sciences	35	2	619	625

967	Kousar M., Almas M., Kamal S., Zia K.M., Rehman S.	High adsorption performance of pH responsive graphene oxide/polyacrylamide hydrogels for the removal of Drimarene Brilliant Blue	2022	Desalination and Water Treatment	252		371	380
968	Ahmad M.N., Masood UI Hassan M., Nawaz F., Anjum M.N., Iqbal S.Z., Hussain T., Mujahid A., Farid M.F.	Synthesis and characterization of poly(o-chloroaniline)/TiO <sub>2</sub> nanocomposites for photocatalytic degradation of direct yellow 50 dye in textile wastewater	2022	Global Nest Journal	24	1	53	58
969	Rashid S., Abouelmagd E.I., Sultana S., Chu Y.-M.	New developments in weighted n-fold type inequalities via discrete generalized Ă¢-proportional fractional operators	2022	Fractals	30	2		
970	Rashid S., Abouelmagd E.I., Khalid A., Farooq F.B., Chu Y.-M.	Some recent developments on dynamical discrete fractional type inequalities in the frame of nonsingular and nonlocal kernels	2022	Fractals	30	2		
971	Noor M.A., Noor K.I., Awan M.U., Khan A.G.	Quasi Variational Inclusions Involving Three Operators	2022	Information Sciences Letters	11	2	589	599
972	Alharbi M., Alshammari A., Alasmari A.F., Alharbi S., Qamar M.T.U., Abbasi S.W., Shaker B., Ahmad S.	Whole Proteome-Based Therapeutic Targets Annotation and Designing of Multi-Epitope-Based Vaccines against the Gram-Negative XDR-Alcaligenes faecalis Bacterium	2022	Vaccines	10	3		

973	Vivas-Cortez M., Awan M.U., Talib S., Kashuri A., Noor M.A.	Multi-Parameter Quantum Integral Identity Involving Rainaâ€™s Function and Corresponding q-Integral Inequalities with Applications	2022	Symmetry	14	3		
974	Vivas-Cortez M., Awan M.U., Talib S., Noor M.A., Noor K.I.	Trapezium-like Inequalities Involving k-th Order Differentiable R <sup>3</sup> -Convex Functions and Applications	2022	Symmetry	14	3		
975	Gillani F., Zahid T., Bibi S., Khan R.S.U., Bhutta M.R., Ghafoor U.	Parametric Optimization for Quality of Electric Discharge Machined Profile by Using Multi-Shape Electrode	2022	Materials	15	6		
976	Ahmed I., Asgher M., Sher F., Hussain S.M., Nazish N., Joshi N., Sharma A., Parra-SaldÃ-var R., Bilal M., Iqbal H.M.N.	Exploring Marine as a Rich Source of Bioactive Peptides: Challenges and Opportunities from Marine Pharmacology	2022	Marine Drugs	20	3		
977	Mazhar M.W., Ishtiaq M., Hussain I., Parveen A., Bhatti K.H., Azeem M., Thind S., Ajaib M., Maqbool M., Sardar T., Muzammil K., Nasir N.	Seed nano-priming with Zinc Oxide nanoparticles in rice mitigates drought and enhances agronomic profile	2022	PLoS ONE	17	45354		

	Dauda W.P., Abraham P., Glen E., Adetunji C.O., Ghazanfar S., Ali S., Al- Zahrani M., Azameti M.K., Alao S.E.L., Zarafi A.B., Abraham M.P., Musa H.	Robust Profiling of Cytochrome P450s (P450ome) in Notable <i>Aspergillus</i> spp.	2022	Life	12	3		
978	Alharbi M., Alshammari A., Alasmari A.F., Alharbi S.M., Tahir Ul Qamar M., Ullah A., Ahmad S., Irfan M., Khalil A.A.K.	Designing of a Recombinant Multi-Epitopes Based Vaccine against <i>Enterococcus mundtii</i> Using Bioinformatics and Immunoinformatics Approaches	2022	International Journal of Environmental Research and Public Health	19	6		
979	Khan S., Ullah A., Ullah S., Saleem M.H., Okla M.K., Al-Hashimi A., Chen Y., Ali S.	Quantifying Temperature and Osmotic Stress Impact on Seed Germination Rate and Seedling Growth of <i>Eruca sativa</i> Mill. via Hydrothermal Time Model	2022	Life	12	3		
980	Ahmad S., Manzoor B., Paracha K.N., Haider S., Liaqat M., Al-Gburi A.J.A., Ghaffar A., Alibakhshikenari M., Dalarsson M.	A Wideband Bear-Shaped Compact Size Implantable Antenna for In-Body Communications	2022	Applied Sciences (Switzerland)	12	6		
981	Zahid T., Gillani F., Ghafoor U., Bhutta M.R.	Synchromodal Transportation Analysis of the One-Belt-One- Road Initiative Based on a Bi-Objective Mathematical Model	2022	Sustainability (Switzerland)	14	6		
982								

983	Faouri Y.S., Ahmad S., Parchin N.O., See C.H., Abd-Alhameed R.	A Novel Meander Bowtie-Shaped Antenna with Multi-Resonant and Rejection Bands for Modern 5G Communications	2022	Electronics (Switzerland)	11	5		
984	Rubab L., Afroz S., Ahmad S., Hussain S., Nawaz I., Irfan A., Batool F., Kotwica-Mojzych K., Mojzych M.	An Update on Synthesis of Coumarin Sulfonamides as Enzyme Inhibitors and Anticancer Agents	2022	Molecules	27	5		
985	Numan M., Jabbar M., Zafar A., Javed H., Younas S., Abosalif K.O.A., Junaid K., Alameen A.A.M., Abdalla A.E., Qamar M.U., Ejaz H.	Prevalence, Genotypic Distribution and the Associated Risk Factors of Hepatitis C Infection in Pakistan Pediatric Patients	2022	Journal of Pure and Applied Microbiology	16	1	130	137
986	Emanuil N., Akram M.S., Ali S., Majrashi A., Iqbal M., El-Esawi M.A., Ditta A., Alharby H.F.	Exogenous Caffeine (1,3,7-Trimethylxanthine) Application Diminishes Cadmium Toxicity by Modulating Physio-Biochemical Attributes and Improving the Growth of Spinach ( <i>Spinacia oleracea</i> L.)	2022	Sustainability (Switzerland)	14	5		
987	Rehman S., Ashfaq U.A., Sufyan M., Shahid I., Ijaz B., Hussain M.	The Insight of In Silico and In Vitro evaluation of Beta vulgaris phytochemicals against Alzheimer's disease targeting acetylcholinesterase	2022	PLoS ONE	17	45354		



993	Sajjad M., Munir H., Kanwal S., Asad Naqvi S.A.	Spatial inequalities in education status and its determinants in Pakistan: A district-level modelling in the context of sustainable development Goal-4	2022	Applied Geography	140			
994	Aslam M.M., Rashid M.A.R., Siddiqui M.A., Khan M.T., Farhat F., Yasmeen S., Khan I.A., Raja S., Rasool F., Sial M.A., Yan Z.	Recent Insights into Signaling Responses to Cope Drought Stress in Rice	2022	Rice Science	29	2	105	117
995	Naz H., Aisha Akram N., Ashraf M., Ingo Hefft D., Latief Jan B.	Leaf extract of neem ( <i>Azadirachta indica</i> ) alleviates adverse effects of drought in quinoa ( <i>Chenopodium quinoa</i> Willd.) plants through alterations in biochemical attributes and antioxidants	2022	Saudi Journal of Biological Sciences	29	3	1367	1374
996	Hanif M.K., Zimmermann K.-H., Anees A.	Accelerating all-pairs shortest path algorithms for bipartite graphs on graphics processing units	2022	Multimedia Tools and Applications	81	7	9549	9566
997	Malik A.R., Sharif S., Shaheen F., Khalid M., Iqbal Y., Faisal A., Aziz M.H., Atif M., Ahmad S., Fakhar-e-Alam M., Hossain N., Ahmad H., Botmart T.	Green synthesis of RGO-ZnO mediated <i>Ocimum basilicum</i> leaves extract nanocomposite for antioxidant, antibacterial, antidiabetic and photocatalytic activity	2022	Journal of Saudi Chemical Society	26	2		

998	Hussain M., Ali A., Yao S.-W., Ghaffar A., Inc M.	Numerical investigation of ohmically dissipated mixed convective flow	2022	Case Studies in Thermal Engineering	31			
999	Ejaz M., Mansha A., Asim S., Shahzad A.	Review article on â€œeffects of ions on the fluorescence of coumarin derivativesâ€•	2022	Chemical Papers	76	3	1295	1311
1000	Rehman U.U., Mahmood K., Ashfaq A., Ali A., Tahir S., Ikram S., Rehman A., Sahar K.U., Ahmad W., Amin N.	Enhanced thermoelectric performance of hydrothermally synthesized CuFeS <sub>2</sub> nanostructures by controlling the Cu/Fe ratio	2022	Materials Chemistry and Physics	279			
1001	Tahir R.A., Mughal S., Nazir A., Noureen A., Jawad A., Waqas M., Sehgal S.A.	The Life Cycle and in silico Elucidation of Non-structural Replicating Proteins of HCV Through a Pharmacoinformatics Approach	2022	Combinatorial Chemistry and High Throughput Screening	25	4	689	701
1002	Rehman A., Ashfaq U.A., Javed M.R., Shahid F., Noor F., Aslam S.	The Screening of Phytochemicals Against NS5 Polymerase to Treat Zika Virus Infection: Integrated Computational Based Approach	2022	Combinatorial Chemistry and High Throughput Screening	25	4	738	751
1003	Liu J.-B., Imran M., Baby S., Siddiqui H.M.A., Shafiq M.K.	Graph Indices for Cartesian Product of F-sum of Connected Graphs	2022	Combinatorial Chemistry and High Throughput Screening	25	3	528	535
1004	Siddique M.H., Ashraf A., Hayat S., Aslam B., Fakhar-e-Alam M., Muzammil S., Atif M., Shahid M., Shafeeq S.,	Antidiabetic and antioxidant potentials of Abelmoschus esculentus: In vitro combined with molecular docking approach	2022	Journal of Saudi Chemical Society	26	2		

	Afzal M., Ahmad S.							
1005	Bashir M., Majid F., Akram S., Ali A., Abdelmohsen S.A.M.	Biodegradation of gelatin stabilized tetragonal zirconia synthesized by microwave assisted sol-gel method	2022	Journal of the Mechanical Behavior of Biomedical Materials	127			
1006	Iftikhar N., Hussain A.I., Chatha S.A.S., Sultana N., Rathore H.A.	Effects of polyphenol-rich traditional herbal teas on obesity and oxidative stress in rats fed a high-fatâ€“sugar diet	2022	Food Science and Nutrition	10	3	698	711
1007	Abrar S., Javed S., Kiran S., Awan H.	Analysis of lead, cadmium, and arsenic in colored cosmetics marketed in Pakistan	2022	Journal of Public Health Policy	43	1	54	64
1008	Waheed M., Mushtaq Z., Imran M., Khan M.K.	Evaluation of physicochemical and sensorial properties of thyme ( <i>Thymus vulgaris</i> L.) leaves powder supplemented cookies	2022	Journal of Food Processing and Preservation	46	3		
1009	Ranjha M.M.A.N., Shafique B., Khalid W., Nadeem H.R., Mueen-ud-Din G., Khalid M.Z.	Applications of Biotechnology in Food and Agriculture: a Mini-Review	2022	Proceedings of the National Academy of Sciences India Section B - Biological Sciences	92	1	11	15

1010	Mujahid A., Rasool N., Qamar M.U., Zubair M., Ahmad F., Altaf A.A., Akhtar A., Shah S.A.A., Alqahtani F., Alsanea S., Albekairi T.H., Nasim M.J., Rasool M.F., Imran I.	Arylation of halogenated thiophene carboxylate via Suzukiâ€“Miyaura reaction: Anti-bacterial study against clinically isolated extensively drug resistant Escherichia coli sequence type 405 and computational investigation	2022	Arabian Journal of Chemistry	15	3		
1011	Umar Ijaz M., Rauf A., Mustafa S., Ahmed H., Ashraf A., Al-Ghanim K., Swamy Mruthinti S., Mahboob S.	Pachypodol attenuates Perfluorooctane sulphonate-induced testicular damage by reducing oxidative stress	2022	Saudi Journal of Biological Sciences	29	3	1380	1385
1012	Shaukat B., Mehmood M.H., Shahid Shah, Anwar H.	Ziziphus Oxyphylla hydro-methanolic extract ameliorates hypertension in L-NAME induced hypertensive rats through NO/cGMP pathway and suppression of oxidative stress related inflammatory biomarkers	2022	Journal of Ethnopharmacology	285			
1013	Taj S., Ahmad M., Alshammari A., Alghamdi A., Ali Ashfaq U.	Exploring the therapeutic potential of benzothiazine-pyrazole hybrid molecules against alpha-glucosidase: Pharmacological and molecular modelling based approach	2022	Saudi Journal of Biological Sciences	29	3	1416	1421

1014	Sheikh Y.A., Paracha K.N., Ahmad S., Bhatti A.R., Butt A.D., Rahim S.K.A.	Analysis of Compact Dual-Band Metamaterial-Based Patch Antenna Design for Wearable Application	2022	Arabian Journal for Science and Engineering	47	3	3509	3518
1015	Ijaz M.U., Shahab M.S., Samad A., Ashraf A., Al-Ghanim K., Mruthinti S.S., Mahboob S.	Tangeretin ameliorates bisphenol induced hepatocyte injury by inhibiting inflammation and oxidative stress	2022	Saudi Journal of Biological Sciences	29	3	1375	1379
1016	Hussain F., Saleem S., Nazeer M., Al-Mubaddel F.S., Ali A., Saleem A., Saleem M.	Mathematical modeling and numerical solution of cross-flow of non-Newtonian fluid: Effects of viscous dissipation and slip boundary conditions	2022	ZAMM Zeitschrift fur Angewandte Mathematik und Mechanik	102	3		
1017	Sherazi T.A., Azam S., Shah S.H., Hussain S., Naqvi S.A.R., Li S.	Zwitterionic analog structured ultrafiltration membranes for high permeate flux and improved anti-fouling performance	2022	Journal of Membrane Science	643			
1018	Tahir Waseem M., Muhammad Junaid H., Gul H., Ali Khan Z., Yu C., Anjum Shahzad S.	Fluorene based fluorescent and colorimetric sensors for ultrasensitive detection of nitroaromatics in aqueous medium	2022	Journal of Photochemistry and Photobiology A: Chemistry	425			
1019	Hussain N., Shafiq ahmed K., Asmatullah, shafiq Ahmed M., Makhdoom Hussain S., javid A.	Potential health risks assessment cognate with selected heavy metals contents in some vegetables grown with four different irrigation sources near Lahore, Pakistan	2022	Saudi Journal of Biological Sciences	29	3	1813	1824

1020	Riaz M., Marschner P.	Addition of Clayey Soil to Sandy Soil Increases Sorption of Water-Extractable Organic C But Also Its Release	2022	Journal of Soil Science and Plant Nutrition	22	1	597	606
1021	Javed S.A., Shahzad S.M., Ashraf M., Kausar R., Arif M.S., Albasher G., Rizwana H., Shakoor A.	Interactive effect of different salinity sources and their formulations on plant growth, ionic homeostasis and seed quality of maize	2022	Chemosphere	291			
1022	Naeem H.M., Tariq S., Moiz M.A., Khan M., Rehman N., Basit M.A.	Activating ZnO-Based Hierarchical Particles for Visible Light Dependent Photocatalytic Performance via Cr-Incorporated Rapid Chemical Synthesis	2022	Crystal Research and Technology	57	3		
1023	Mastoi A.K., Bhanbhro R., Chen X., Fatah T.A., Mehroz A.	Assessing long-term performance of stabilized Zn-contaminated dredged sediment slurry treated with the PHDVPSS method	2022	Environmental Science and Pollution Research	29	13	19262	19272
1024	Akhtar M.F., Ashraf H., Uzair M., Ahmad S., Rasul A., Abbas G., Shah S., Hanif M.	Development of leachable enalapril tablets by controlled porosity osmotic pump technique; a unique approach to enhance its sustained release effect	2022	Journal of Coatings Technology and Research	19	2	497	507
1025	Qader M.R., Khan S., Kamal M., Usman M., Haseeb M.	Forecasting carbon emissions due to electricity power generation in Bahrain	2022	Environmental Science and Pollution Research	29	12	17346	17357

1026	Shahbaz M., Ammar M., Hussain S., Ahmed T., Ashraf W.M., Raza A., Amjad A., Zou D.	Mesophilic batch co-digestion of municipal solid waste and food waste: improved digester performance and stability at optimum organic loading rates	2022	Journal of Chemical Technology and Biotechnology	97	3	633	642
1027	Bendaida M., Bousahla A.A., Mouffoki A., Heireche H., Bourada F., Tounsi A., Benachour A., Tounsi A., Hussain M.	Dynamic Properties of Nonlocal Temperature-Dependent FG Nanobeams under Various Thermal Environments	2022	Transport in Porous Media	142	45293	187	208
1028	Ahmad A., Sohail M.M., Safdar M.R.	Religious construction and interpretation of pain: Lived experiences of terminally ill hepatitis C Muslim patients	2022	Journal of Community Psychology	50	2	983	991
1029	Younus M.U., Khan M.K., Bhatti A.R.	Improving the Software-Defined Wireless Sensor Networks Routing Performance Using Reinforcement Learning	2022	IEEE Internet of Things Journal	9	5	3495	3508
1030	Waqas H., Kafait A., Alghamdi M., Muhammad T., Alshomrani A.S.	Thermo-bioconvectional transport of magneto-Casson nanofluid over a wedge containing motile microorganisms and variable thermal conductivity	2022	Alexandria Engineering Journal	61	3	2444	2454
1031	Jawaria R., Khan M.U., Hussain M., Muhammad S., Sagir M., Hussain A., Al-Sehemi A.G.	Synthesis and characterization of ferrocene-based thiosemicarbazones along with their computational studies for potential as inhibitors for SARS-CoV-2	2022	Journal of the Iranian Chemical Society	19	3	839	846

1032	Waqas H., Farooq U., Alqarni M.S., Muhammad T.	Numerical investigation for 3D bioconvection flow of Carreau nanofluid with heat source/sink and motile microorganisms	2022	Alexandria Engineering Journal	61	3	2366	2375
1033	Ehsan S., Tariq A., Nazir M.S., Shabbir M.S., Shabbir R., Lopez L.B., Ullah W.	Nexus between corporate social responsibility and earnings management: Sustainable or opportunistic	2022	Managerial and Decision Economics	43	2	478	495
1034	Hashim M., Nazam M., Zia-Ur-Rehman M., Abrar M., Baig S.A., Nazim M., Hussain Z.	Modeling Supply Chain Sustainability-Related Risks and Vulnerability: Insights from the Textile Sector of Pakistan	2022	Autex Research Journal	22	1	123	134
1035	Iqbal Z., Abbas F., Ibrahim M., Mahmood A., Gul M., Qureshi T.I.	Ecological risk assessment of soils under different wastewater irrigation farming system in Punjab, Pakistan.	2022	International Journal of Environmental Science and Technology	19	3	1925	1936
1036	Sajid M.M., Shad N.A., Javed Y., Shafique M., Afzal A.M., Khan S.B., Amin N., Hassan M.A., Khan M.U.H., Tarabi T., Zhai H.	Efficient Photocatalytic and Antimicrobial Behaviour of Zinc Oxide Nanoplates Prepared By Hydrothermal Method	2022	Journal of Cluster Science	33	2	773	783
1037	Janjua M.R.S.A., Mahmood R., Haroon M., Anwar F., Khan M.U., Ullah N.	In Silico Modelling of Viscoelastic Surfactants: Towards NLO Response and Novel Physical Insights through Bridging Acceptor	2022	Journal of Cluster Science	33	2	519	528

1038	Akram W., Yasin N.A., Shah A.A., Khan W.U., Li G., Ahmad A., Ahmed S., Hussaan M., Rizwan M., Ali S.	Exogenous application of liquiritin alleviated salt stress and improved growth of Chinese kale plants	2022	Scientia Horticulturae	294		
1039	Huo W., Ullah M.R., Zulfiqar M., Parveen S., Kibria U.	Financial Development, Trade Openness, and Foreign Direct Investment: A Battle Between the Measures of Environmental Sustainability	2022	Frontiers in Environmental Science	10		
1040	Farhat F., Arfan M., Wang X., Tariq A., Kamran M., Tabassum H.N., Tariq I., Mora-Poblete F., Iqbal R., El-Sabrout A.M., Elansary H.O.	The Impact of Bio-Stimulants on Cd-Stressed Wheat ( <i>Triticum aestivum L.</i> ): Insights Into Growth, Chlorophyll Fluorescence, Cd Accumulation, and Osmolyte Regulation	2022	Frontiers in Plant Science	13		
1041	Ali M., Latif A., Bibi S., Ali S., Ali A., Ahmad M., Ahmad R., Khan A.A., Khan A., Ribeiro A.I., Al-Harrasi A., Farooq U.	Facile Synthesis of the Shape-Persistent 4-Hydroxybenzaldehyde Based Macrocycles and Exploration of their Key Electronic Properties: An Experimental and DFT Approach	2022	ChemistrySelect	7	7	
1042	Riaz S., Ashraf M., Aziz H., Younus A., Umair M., Salam A., Iqbal K., Hussain M.T., Hussain T.	Cationization of TiO <sub>2</sub> nanoparticles to develop highly durable multifunctional cotton fabric	2022	Materials Chemistry and Physics	278		

1043	Usman M., Jahanger A., Makhdum M.S.A., Balsalobre-Lorente D., Bashir A.	How do financial development, energy consumption, natural resources, and globalization affect Arctic countries' economic growth and environmental quality? An advanced panel data simulation	2022	Energy	241			
1044	Zhang J., Zhang K., Wang W., Shahzad A., Cheng Y., Cai G.	Permeation by Electrowetting Actuation: Revealing the Prospect of a Micro-valve Based on Ionic Liquid	2022	Journal of Colloid and Interface Science	608		114	119
1045	Wang N., Wu T., Du D., Mei J., Luo H., Liu Z., Saleemi M.K., Zhang R., Chang C., Mehmood M.A., Zhu H.	Transcriptome and Gut Microbiota Profiling Revealed the Protective Effect of Tibetan Tea on Ulcerative Colitis in Mice	2022	Frontiers in Microbiology	12			
1046	Naqvi S.A.R., Sherazi T.A., Hassan S.U., Shahzad S.A., Faheem Z.	Anti-inflammatory, anti-infectious and anti-cancer potential of marine algae and sponge: A review	2022	European Journal of Inflammation	20			
1047	Shahid A., Siddiqui A.J., Musharraf S.G., Liu C.-G., Malik S., Syafiuddin A., Boopathy R., Tarbiah N.I., Gull M., Mehmood M.A.	Untargeted metabolomics of the alkaliphilic cyanobacterium Plectonema terebrans elucidated novel stress-responsive metabolic modulations	2022	Journal of Proteomics	252			

1048	Yasmeen N., Jabbar A., Shah T., Fang L.-X., Aslam B., Naseeb I., Shakeel F., Ahmad H.I., Baloch Z., Liu Y.	One Health Paradigm to Confront Zoonotic Health Threats: A Pakistan Prospective	2022	Frontiers in Microbiology	12			
1049	Saeed M., Khan I., Adeel M., Akram N., Munneer M.	Synthesis of a CoO-ZnO photocatalyst for enhanced visible-light assisted photodegradation of methylene blue	2022	New Journal of Chemistry	46	5	2224	2231
1050	Munir N., Mahmood Z., Shahid M., Afzal M.N., Jahangir M., Ali Shah S.M., Tahir I.M., Riaz M., Hussain S., Akram M., Yousaf F.	Withania somnifera Chemical Constituentsâ€™ In Vitro Antioxidant Potential and Their Response on Spermatozoa Parameters	2022	Dose-Response	20	1		
1051	Khan R.A., Hossain R., Roy P., Jain D., Mohammad Saikat A.S., Roy Shuvo A.P., Akram M., Elbossaty W.F., Khan I.N., Painuli S., Semwal P., Rauf A., Islam M.T., Khan H.	Anticancer effects of acteoside: Mechanistic insights and therapeutic status	2022	European Journal of Pharmacology	916			

1052	Ahmed S., Zulfiqar W., Javed F., Arshad H., Abbas G., Laref A., Alay-e-Abbas S.M.	Accurate first-principles evaluation of structural, electronic, optical and photocatalytic properties of BaHfO <sub>3</sub> and SrHfO <sub>3</sub> perovskites	2022	Journal of Alloys and Compounds	892			
1053	Riaz M., Kamran M., Rizwan M., Ali S., Wang X.	Foliar application of silica sol alleviates boron toxicity in rice ( <i>Oryza sativa</i> ) seedlings	2022	Journal of Hazardous Materials	423			
1054	Ahmed T., Noman M., Rizwan M., Ali S., Ijaz U., Nazir M.M., ALHaithloul H.A.S., Alghanem S.M., Abdulmajeed A.M., Bin Li	Green molybdenum nanoparticles-mediated bio-stimulation of <i>Bacillus</i> sp. strain ZH16 improved the wheat growth by managing in planta nutrients supply, ionic homeostasis and arsenic accumulation	2022	Journal of Hazardous Materials	423			
1055	Zeb B., Alam K., Ditta A., Ullah S., Ali H.M., Ibrahim M., Salem M.Z.M.	Variation in Coarse Particulate Matter (PM10) and Its Characterization at Multiple Locations in the Semiarid Region	2022	Frontiers in Environmental Science	10			
1056	Riaz B., Kashif Zahoor M., Malik K., Ahmad A., Majeed H.N., Jabeen F., Zulhusnain M., Ranian K.	Frequency of Pyrethroid Insecticide Resistance kdr Gene and Its Associated Enzyme Modulation in Housefly, <i>Musca domestica</i> L. Populations From Jhang, Pakistan	2022	Frontiers in Environmental Science	9			
1057	Babale S.A., Rahim S.K.A., Tan K.G., Paracha K.N., Butt A.D., Ali I.,	PET-Based Instant Inkjet-Printed 4 Å— 4 Butler Matrix Beamforming Network	2022	Applied Computational Electromagnetics Society Journal	37	2	199	208

	Lawan S.H.							
1058	Ghamkhar M., Hussain M., Khadimallah M.A., Ayed H., Naz M.Y., Tounsi A.	Design of intelligent estimation of composite fluid-filled shell for three layered active control structure	2022	Computers and Concrete	29	2	117	126
1059	Jalil M., Iqbal W., Hussain M., Khadimallah M.A., Alshoaibi A., Baili J., Khedher K.M., Ali E.A., Tounsi A.	Settlement of velocity dissemination with fluid parameters for the configuration of stretching cylinder	2022	Steel and Composite Structures	42	3	389	396
1060	Alghamdi S., Hussain M., Khadimallah M.A., Asghar S., Ghandourah E., Alzahrani A.O.M., Alzahrani M.A.	A nonlocal system for the identification of active vibration response of chiral double walled CNTs	2022	Steel and Composite Structures	42	3	353	361
1061	Rashid S., Noor M.A., Noor K.I.	Inequalities Involving New Fractional Integrals Technique via Exponentially Convex Functions	2022	Ukrainian Mathematical Journal	73	9	1412	1427
1062	Akram W., Adeel S., Amin N., Habib N., Inayat A., Mirnezhad S.	Impact of MW rays on extraction and application of Ficus religiosa bark based natural colourant for cotton dyeing	2022	Journal of Engineered Fibers and Fabrics	17			
1063	Khadimallah M.A., Harbaoui I., Hussain M., Qazaq A., Ali E., Tounsi	Polymers in construction: A brief review authors	2022	Advances in Concrete Construction	13	2	113	121

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1064	Zafar S., Perveen S., Khan M.K., Shaheen M.R., Hussain R., Sarwar N., Rashid S., Nafees M., Farid G., Alamri S., Shah A.A., Javed T., Irfan M., Siddiqui M.H.	Effect of zinc nanoparticles seed priming and foliar application on the growth and physiobiochemical indices of spinach ( <i>Spinacia oleracea L.</i> ) under salt stress	2022	PLoS ONE	17	2 Febury	
1065	Ullah I., Saleem F., Iyakaremye V., Yin J., Ma X., Syed S., Hina S., Asfaw T.G., Omer A.	Projected Changes in Socioeconomic Exposure to Heatwaves in South Asia Under Changing Climate	2022	Earth's Future	10	2	
1066	Khan R.U., Fatima A., Naz S., Ragni M., Tarricone S., Tufarelli V.	Perspective, Opportunities and Challenges in Using Fennel ( <i>Foeniculum vulgare</i> ) in Poultry Health and Production as an Eco-Friendly Alternative to Antibiotics: A Review	2022	Antibiotics	11	2	
1067	Komal N., Zaman Q.U., Yasin G., Nazir S., Ashraf K., Waqas M., Ahmad M., Batool A., Talib I., Chen Y.	Carbon Storage Potential of Agroforestry System near Brick Kilns in Irrigated Agro-Ecosystem	2022	Agriculture (Switzerland)	12	2	

1068	Khalil A.A.K., Qazi A.S., Nasir A., Ahn M.-J., Shah M.A., Ahmad M.S., Sajjad W., Ali T., Naeem M., Shah F.A., Khan M.T.A., Romman M., Rehman S.U., Haider A., Noor R.	2-Methoxy-6-Acetyl-7-Methyljuglone: A Bioactive Phytochemical with Potential Pharmacological Activities	2022	Anti-Cancer Agents in Medicinal Chemistry	22	4	687	693
1069	Akhtar M.N., Ul-Haq T., Ahmad F., Imran M., Ahmed W., Ghaffar A., Shahid M., Saleem M.H., Alshaya H., Okla M.K., Ali S.	Application of Potassium along with Nitrogen under Varied Moisture Regimes Improves Performance and Nitrogen-Use Efficiency of High-and Low-Potassium Efficiency Cotton Cultivars	2022	Agronomy	12	2		
1070	Dominic S., Hussain A.I., Saleem M.H., Alshaya H., Jan B.L., Ali S., Wang X.	Variation in the Primary and Secondary Metabolites, Antioxidant and Antibacterial Potentials of Tomatoes, Grown in Soil Blended with Different Concentration of Fly Ash	2022	Plants	11	4		
1071	Farooq U., Min-Dianey K.A.A., Rajagopalan P., Malik M., Kongnine D.M., Choi J.R., Pham P.V.	Photodetection Tuning with High Absorptivity Using Stacked 2D Heterostructure Films	2022	Nanomaterials	12	4		

1072	Imran M., Yasmin S., Waqas H., Khan S.A., Muhammad T., Alshammari N., Hamadneh N.N., Khan I.	Computational Analysis of Nanoparticle Shapes on Hybrid Nanofluid Flow Due to Flat Horizontal Plate via Solar Collector	2022	Nanomaterials	12	4		
1073	Ishtiaq M., Hussain I., Bhatti K.H., Maqbool M., Ahmed K.S., Ajaib M., Shah A.U., Mushtaq W., Hussain T., Ghani A., Khanum H., Mazhar M.W., Mazhar M., Sardar T., Nasif O., Ansari M.J., Ondrisik P.	Study of impacts of brickkiln emanations on soil quality of agriculture lands in selected areas of District Bhimber, Azad Jammu and Kashmir, Pakistan	2022	PLoS ONE	17	44594		
1074	Haq S.U., Shahbaz P., Abbas A., Batool Z., Alotaibi B.A., Traore A.	Tackling Food and Nutrition Insecurity among Rural Inhabitants: Role of Household-Level Strategies with a Focus on Value Addition, Diversification and Female Participation	2022	Land	11	2		
1075	Ahmad S., Akhtar R., Zahoor A.F.	Comprehensive Account on the Synthesis of (-)-Balanol and its Analogues	2022	Current Organic Synthesis	19	1	56	85
1076	Raza F., Tamoor M., Miran S., Arif W., Kiren T., Amjad W., Hussain M.I., Lee G.-H.	The Socio-Economic Impact of Using Photovoltaic (PV) Energy for High-Efficiency Irrigation Systems: A Case Study	2022	Energies	15	3		

1077	Hussain M., Wang Z., Huang G., Mo Y., Kaousar R., Duan L., Tan W.	Comparison of Droplet Deposition, 28-Homobrassinolide Dosage Efficacy and Working Efficiency of the Unmanned Aerial Vehicle and Knapsack Manual Sprayer in the Maize Field	2022	Agronomy	12	2		
1078	Shahid S., Ali Q., Ali S., Al-Misned F.A., Maqbool S.	Water Deficit Stress Tolerance Potential of Newly Developed Wheat Genotypes for Better Yield Based on Agronomic Traits and Stress Tolerance Indices: Physio-Biochemical Responses, Lipid Peroxidation and Antioxidative Defense Mechanism	2022	Plants	11	3		
1079	Tabassum S., Khalid H.R., Ul Haq W., Aslam S., Alshammari A., Alharbi M., Riaz Rajoka M.S., Khurshid M., Ashfaq U.A.	Implementation of System Pharmacology and Molecular Docking Approaches to Explore Active Compounds and Mechanism of Ocimum Sanctum against Tuberculosis	2022	Processes	10	2		
1080	Ali B., Wang X., Saleem M.H., Azeem M.A., Afridi M.S., Nadeem M., Ghazal M., Batool T., Qayyum A., Alatawi A., Ali S.	Bacillus mycoides PM35 Reinforces Photosynthetic Efficiency, Antioxidant Defense, Expression of Stress-Responsive Genes, and Ameliorates the Effects of Salinity Stress in Maize	2022	Life	12	2		

1081	Irfan A., Faiz S., Rasul A., Zafar R., Zahoor A.F., Kotwica-Mojzych K., Mojzych M.	Exploring the Synergistic Anticancer Potential of Benzofuran-“Oxadiazoles and Triazoles: Improved Ultrasound-and Microwave-Assisted Synthesis, Molecular Docking, Hemolytic, Thrombolytic and Anticancer Evaluation of Furan-Based Molecules	2022	Molecules	27	3		
1082	Akram N., Saeed M., Usman M.	Role of Macrodiols in the Synthesis and Thermo-Mechanical Behavior of Anti-Tack Water Borne Polyurethane Dispersions	2022	Polymers	14	3		
1083	Munir R., Hadi A., Khan S.-U.-D., Asghar S., Irfan M., Khan I.U., Hameed M., Inam S., Islam N., Hassan S.F., Ishtiaq M., Shah P.A., Iqbal M.S., Syed H.K., Khames A., Abourehab M.A.S.	Solubility and Dissolution Enhancement of Dexibuprofen with Hydroxypropylbetacyclodextrin (HP $\beta$ CD) and Poloxamers (188/407) Inclusion Complexes: Preparation and In Vitro Characterization	2022	Polymers	14	3		
1084	Khalid H., Ashfaq U.A.	Molecular Docking and Pharmacoinformatics Studies Reveal Potential Phytochemicals Against HCV NS5B Polymerase	2022	Combinatorial Chemistry and High Throughput Screening	25	2	335	346

1085	Alatawi A., Wang X., Maqbool A., Saleem M.H., Usman K., Rizwan M., Yasmeen T., Arif M.S., Noreen S., Hussain A., Ali S.	S•Fertilizer (Elemental Sulfur) Improves the Phytoextraction of Cadmium through <i>Solanum nigrum</i> L.	2022	International Journal of Environmental Research and Public Health	19	3		
1086	Shehzad F., Ali Q., Ali S., Al-Misned F.A., Maqbool S.	Fertigation with Zn-Lysine Confers Better Photosynthetic Efficiency and Yield in Water Stressed Maize: Water Relations, Antioxidative Defense Mechanism and Nutrient Acquisition	2022	Plants	11	3		
1087	Rashid H., Ishtiaq S.M., Hussain Z., Faisal M.N., Anwar H., Qureshi A.S., Ur Rasheed M., Rasheed M., Riaz A., Khan J.A.	SYNBIOTICS SUPPLEMENTATION AMELIORATES HIGH FAT AND SUGAR DIET-ASSOCIATED OXIDATIVE STRESS AND HISTOLOGICAL ARCHITECTURE OF INTESTINE, LIVER AND KIDNEY IN RATS	2022	Journal of Animal and Plant Sciences	32	1	69	77
1088	Saleem M.H., Parveen A., Khan S.U., Hussain I., Wang X., Alshaya H., El-Sheikh M.A., Ali S.	Silicon Fertigation Regimes Attenuates Cadmium Toxicity and Phytoremediation Potential in Two Maize ( <i>Zea mays</i> L.) Cultivars by Minimizing Its Uptake and Oxidative Stress	2022	Sustainability (Switzerland)	14	3		

1089	Ali B., Wang X., Saleem M.H., Sumaira, Hafeez A., Afridi M.S., Khan S., Zaib-Un-nisa, Ullah I., Amaral JÃ©nior A.T.D., Alatawi A., Ali S.	PGPR-Mediated Salt Tolerance in Maize by Modulating Plant Physiology, Antioxidant Defense, Compatible Solutes Accumulation and Bio-Surfactant Producing Genes	2022	Plants	11	3		
1090	Naz S., Khan N.A., Tanweer A., Moazzam S., Ullah Q., Asad F., Khattak I., Batool S., Khan R.U.	Incidence of Gastrointestinal Parasites in Pavo cristatus under Cage System and Comparative Efficacy of Two Anthelmintics	2022	Pakistan Journal of Zoology	54	1	495	498
1091	Rafi S., Akbar M.A., Yu W., Alsanad A., Gumaei A., Sarwar M.U.	Exploration of DevOps testing process capabilities: An ISM and fuzzy TOPSIS analysis	2022	Applied Soft Computing	116			
1092	Ullah F., Khan T.A., Iltaf J., Anwar S., Khan M.F.A., Khan M.R., Ullah S., Rehman M.F.U., Mustaqueem M., Kotwica-Mojzych K., Mojzych M.	Heterocyclic Crown Ethers with Potential Biological and Pharmacological Properties: From Synthesis to Applications	2022	Applied Sciences (Switzerland)	12	3		
1093	Farooq T., Hussain M.D., Shakeel M.T., Tariqjaveed M., Aslam M.N., Naqvi S.A.H., Amjad R., Tang Y., She X., He Z.	Deploying Viruses against Phytobacteria: Potential Use of Phage Cocktails as a Multifaceted Approach to Combat Resistant Bacterial Plant Pathogens	2022	Viruses	14	2		

1094	Benkhadda O., Ahmad S., Saih M., Chaji K., Reha A., Ghaffar A., Khan S., Alibakhshikenari M., Limiti E.	Compact Broadband Antenna with Vicsek Fractal Slots for WLAN and WiMAX Applications	2022	Applied Sciences (Switzerland)	12	3		
1095	Ikram S., Jacob J., Al-Harbi F.F., Mahmood K., Ali A., Amin N., Sikindar T., Amami M., Hussain S., Javaid K.	Sulfurization temperature induced enhancement in thermoelectric properties of polycrystalline WS <sub>2</sub> nanomaterials	2022	Optical Materials	124			
1096	Ijaz M.U., Iqbal M., Iqbal M.A., Ashraf A., Al-Ghanim K.A., Al-Misned F., Ahmed Z., KarataÄŸ D., Atique U., Mahboob S.	In vivo antioxidant efficacy and therapeutic potential of Artemisia brevifolia leaves extract against CCl <sub>4</sub> -induced reproductive damages in male albino rats	2022	Journal of King Saud University - Science	34	2		
1097	Maqbool A., Rizwan M., Yasmeen T., Arif M.S., Hussain A., Mansha A., Ali S., Alshaya H., Okla M.K.	Phosphorus Fertilizers Enhances the Phytoextraction of Cadmium through Solanum nigrum L.	2022	Plants	11	3		
1098	Mahmood I., Raza A., Dehghani-Sanj A.A.	Evaluation of an adjustable ankle-foot orthosis impact on walking stability during gait transitional phases	2022	Medical Engineering and Physics	100			

1099	Huang Y., Haseeb M., Usman M., Ozturk I.	Dynamic association between ICT, renewable energy, economic complexity and ecological footprint: Is there any difference between E-7 (developing) and G-7 (developed) countries?	2022	Technology in Society	68			
1100	Abbas G., Rehman A.U., Gull W., Afzaal M., Amin N., Ben Farhat L., Amami M., Morley N.A., Akhtar M., Arshad M.I., Ghuffar A., Mahmood A., Ibrahim M.	Impact of Co <sup>2+</sup> on the spectral, optoelectrical, and dielectric properties of Mg 0.25 Ni 0.25 Cu0.5 <sup>x</sup> Cox Fe 1.97 La 0.03 O <sub>4</sub> ferrites prepared via sol-gel auto-combustion route	2022	Journal of Sol-Gel Science and Technology	101	2	428	442
1101	Mahmood A., Munir T., Fakhar-e-Alam M., Atif M., Shahzad K., Alimgeer K.S., Nguyen Gia T., Ahmed H., Ahmad S.	Analyses of structural and electrical properties of aluminium doped ZnO-NPs by experimental and mathematical approaches	2022	Journal of King Saud University - Science	34	2		
1102	Marghoob M.U., Noureen A., Raza A., Khan W.S., Iftikhar M., Sher F.	Synthesis and toxicity assessment of environment friendly high yield ceria nanoparticles for biosafety	2022	Journal of Environmental Chemical Engineering	10	1		
1103	Fatima I., Ahmad S., Abbasi S.W., Ashfaq U.A., Shahid F., Tahir ul Qamar M., Rehman A., Allemailem K.S.	Designing of a multi-epitopes-based peptide vaccine against rift valley fever virus and its validation through integrated computational approaches	2022	Computers in Biology and Medicine	141			

1104	Pandian J., Zachariah A., Chandramohan B., Mahboob S., Al-Ghanim K.A., Nicoletti M., Zaib-Un-Nisa, Govindarajan M.	DNA barcoding of waterbirds: A novel technique in environmental conservation biology	2022	Journal of King Saud University - Science	34	2		
1105	Rahim M.A., Imran M., Khan M.K., Ahmad M.H., Ahmad R.S.	Impact of spray drying operating conditions on encapsulation efficiency, oxidative quality, and sensorial evaluation of chia and fish oil blends	2022	Journal of Food Processing and Preservation	46	2		
1106	Arshad M., Awais M., Bashir R., Ahmad S.R., Anwar-ul-Haq M., Senousy H.H., Iftikhar M., Anjum M.U., Ramzan S., Alharbi S.A., BÃ¡jrek V., Brestic M., Noman A.	Assessment of wheat productivity responses and soil health dynamics under brackish ground water	2022	Saudi Journal of Biological Sciences	29	2	793	803
1107	Zar Pasha A., Anwer Bukhari S., Ali El Enshasy H., El Adawi H., Al Obaid S.	Compositional analysis and physicochemical evaluation of date palm ( <i>Phoenix dactylifera L.</i> ) mucilage for medicinal purposes	2022	Saudi Journal of Biological Sciences	29	2	774	780
1108	Balsalobre-Lorente D., IbÃ¡ñez-LuzÃ³n L., Usman M., Shahbaz M.	The environmental Kuznets curve, based on the economic complexity, and the pollution haven hypothesis in PIIGS countries	2022	Renewable Energy	185		1441	1455

1109	Aslam A., Rehman A.U., Amin N., Amami M., Nabi M.A., Alrobei H., Asghar M., Morley N.A., Akhtar M., Arshad M.I., Maraj M., Abbas K.	Solâ€“Gel Auto-combustion Preparation of M <sub>2+</sub> = Mg <sub>2+</sub> , Mn <sub>2+</sub> , Cd <sub>2+</sub> Substituted M <sub>0.25</sub> Ni <sub>0.15</sub> Cu <sub>0.25</sub> Co <sub>0.35</sub> Fe <sub>2</sub> O <sub>4</sub> Ferrites and Their Characterizations	2022	Journal of Superconductivity and Novel Magnetism	35	2	473	483
1110	Jabeen K., Rehman K., Akash M.S.H.	Genetic mutations of APOE $\mu$ 4 carriers in cardiovascular patients lead to the development of insulin resistance and risk of Alzheimer's disease	2022	Journal of Biochemical and Molecular Toxicology	36	2		
1111	Mustafa G., Iqbal A., Javid A., Manzoor M., Aslam S., Ali A., Muhammad Azam S., Khalid M., Farooq M., Al Naggar Y., Ali Alharbi S., Ali El Enshasy H., Abd Malek R., Qamer S., Hussain A.	Antibacterial properties of <i>Apis dorsata</i> honey against some bacterial pathogens	2022	Saudi Journal of Biological Sciences	29	2	730	734
1112	Yousaf S., Rehman A., Masood M., Ali K., Suleman N.	Occurrence and molecular identification of an invasive rice strain of fall armyworm <i>Spodoptera frugiperda</i> (Lepidoptera: Noctuidae) from Sindh, Pakistan, using mitochondrial cytochrome c oxidase I gene sequences	2022	Journal of Plant Diseases and Protection	129	1	71	78

1113	Ashiq H., Nadeem N., Mansha A., Iqbal J., Yaseen M., Zahid M., Shahid I.	G-C3N4/Ag@CoWO4: A novel sunlight active ternary nanocomposite for potential photocatalytic degradation of rhodamine B dye	2022	Journal of Physics and Chemistry of Solids	161			
1114	Riaz M., Khaliq Q.-U.-A., Abid M., Arshad I.A.	On designing efficient sequential schemes to monitor non-normal processes	2022	Quality and Reliability Engineering International	38	1	615	634
1115	Nie E., Wang H., Chen Y., Lu Y., Akhtar K., Riaz M., Zhang S., Yu Z., Ye Q.	Distinct uptake and accumulation profiles of triclosan in youdonger ( <i>Brassica campestris</i> subsp. <i>Chinensis</i> var. <i>communis</i> ) under two planting systems: Evidence from <sup>14</sup> C tracing techniques	2022	Chemosphere	288			
1116	Saif M.J., Naveed M.	Effect of pristine halloysite nanotubes on dynamic mechanical and thermal behavior of reinforced epoxy nanocomposites	2022	Iranian Polymer Journal (English Edition)	31	2		
1117	Ullah I., Tamseel M., Amami M., Javed M.R., Javaid K., Mahmood K., Ikram S., Ali A., Amin N., Hussain M.S., Ali M.Y., Arshad M.I.	Growth and characterization of Ag–Al <sub>2</sub> O <sub>3</sub> composites thin films for thermoelectric power generation applications	2022	Ceramics International	48	3	3647	3651
1118	Fatima S., Mansha A., Asim S., Shahzad A.	Absorption spectra of coumarin and its derivatives	2022	Chemical Papers	76	2	627	638

1119	Mustafa M., Ali L., Islam W., Noman A., Zhou C., Shen L., Zhu T., Can L., Nasif O., Gasparovic K., Ilatif F., Gao J.	Heterologous expression and characterization of glycoside hydrolase with its potential applications in hyperthermic environment	2022	Saudi Journal of Biological Sciences	29	2	751	757
1120	Naz F., Ciprian M., Luo Z., Yan S., Iqbal S.Z., Zhu M., Chaemchuen S., Verpoort F.	Random Copolymerization of $\text{\textmu}$ -Caprolactone and L-Lactide by Ring Opening Polymerization Using a Co/N-Doped Carbon Framework as Catalyst	2022	Chemistry Africa	5	1	79	87
1121	Ali H.T., Ramzan M., Imran Arshad M., Morley N.A., Hassan Abbas M., Yusuf M., Ur Rehman A., Mahmood K., Ali A., Amin N., Ajaz-Un-Nabi M.	Tailoring the optical and magnetic properties of La-BaM hexaferrites by Ni substitution	2022	Chinese Physics B	31	2		
1122	Shahid F., Alghamdi Y.S., Mashraqi M., Khurshid M., Ashfaq U.A.	Proteome based mapping and molecular docking revealed DnaA as a potential drug target against <i>Shigella sonnei</i>	2022	Saudi Journal of Biological Sciences	29	2	1147	1159
1123	Adeel S., Habib N., Batool F., Rahman A., Ahmad T., Amin N.	Eco-friendly approach towards isolation of colorant from Esfand for bio-mordanted silk dyeing	2022	Environmental Science and Pollution Research	29	9	13523	13533
1124	Hasan M., Adeel S., Batool F., Ahmad T., Tang R.-C., Amin N.,	Sustainable application of Cassia obovata-based chrysophanic acid as potential source of yellow natural colorant for textile dyeing	2022	Environmental Science and Pollution Research	29	7	10740	10753

	Khan S.R.							
1125	Shaheen S., Khan M.A., Shahid M.N., Shamim Z., Rasool B., Hussain K., Khalid S., Harun N., Siddique R., Sonia R., Khan F.	Morphological and palynological assessment of taxonomically problematic genus Paspalum based on light and scanning electron microscopy	2022	Microscopy Research and Technique	85	2	623	629
1126	Jahanger A., Usman M., Ahmad P.	A step towards sustainable path: The effect of globalization on China's carbon productivity from panel threshold approach	2022	Environmental Science and Pollution Research	29	6	8353	8368
1127	Nazir H.Z., Hussain T., Abbas Z., Akhtar N., Abid M., Riaz M.	On developing robust adaptive approaches for monitoring location of non-normal environments	2022	Quality and Reliability Engineering International	38	1	326	342
1128	Rashid S., Sultana S., Karaca Y., Khalid A., Chu Y.-M.	SOME FURTHER EXTENSIONS CONSIDERING DISCRETE PROPORTIONAL FRACTIONAL OPERATORS	2022	Fractals	30	1		
1129	Amin M.N., Ahmed A., Li Y., Li C., Zhang S., Ammar M., Park Y.-K.	Ex-situ catalytic fast pyrolysis of low-rank coal over HZSM-5 and modified Mg/HZSM-5 catalysts	2022	International Journal of Energy Research	46	2	891	899
1130	Razaq A., Ahmad M., Yousaf A., Alawida M., Ullah A., Shuaib U.	A Group Theoretic Construction of Large Number of AES-Like Substitution-Boxes	2022	Wireless Personal Communications	122	3	2057	2080

1131	Arif R., Zia M.A., Mustafa G.	Structural and Functional Annotation of Napin-Like Protein from Momordica charantia to Explore its Medicinal Importance	2022	Biochemical Genetics	60	1	415	432
1132	Waqas H., Kafait A., Muhammad T., Farooq U.	Numerical study for bio-convection flow of tangent hyperbolic nanofluid over a Riga plate with activation energy	2022	Alexandria Engineering Journal	61	2	1803	1814
1133	Muhammad T., Waqas H., Manzoor U., Farooq U., Fatima Rizvi Z.	On doubly stratified bioconvective transport of Jeffrey nanofluid with gyrotactic motile microorganisms	2022	Alexandria Engineering Journal	61	2	1571	1583
1134	Waqas H., Wakif A., Al-Mdallal Q., Zaydan M., Farooq U., Hussain M.	Significance of magnetic field and activation energy on the features of stratified mixed radiative-convective couple-stress nanofluid flows with motile microorganisms	2022	Alexandria Engineering Journal	61	2	1425	1436
1135	Shah M.Y., Mahmood S., Mustafa G., Faheem M., Javed K., Ammar M.	Synthesis of Mgâ€“Coâ€“LDH material and its applications for analyze the adsorption and desorption behavior of 4-nitrophenol	2022	Journal of the Iranian Chemical Society	19	2	513	520
1136	Tabassum S., Zahoor A.F., Ahmad S., Noreen R., Khan S.G., Ahmad H.	Cross-coupling reactions towards the synthesis of natural products	2022	Molecular Diversity	26	1	647	689

1137	Sikandar S., Zahoor A.F., Naheed S., Parveen B., Ali K.G., Akhtar R.	Fukuyama reduction, Fukuyama coupling and Fukuyamaâ€“Mitsunobu alkylation: recent developments and synthetic applications	2022	Molecular Diversity	26	1	589	628
1138	Naqvi S.M.R.S., Farooq U., Aiyashi M.A., Waqas H.	Comprehensive analysis of thermally radiative transport of Sisko fluid over a porous stretchable curved surface with gold nanoparticles	2022	International Journal of Modern Physics B	36	3		
1139	Rashid S., Kubra K.T., Jafari H., Lehre S.U.	A semi-analytical approach for fractional order Boussinesq equation in a gradient unconfined aquifers	2022	Mathematical Methods in the Applied Sciences	45	2	1033	1062
1140	Abed D.Z., Sadeghian R., Mohammadi S., Akram M.	Thymus persicus (Ronniger ex Rech. f.) Jalas alleviates nociceptive and neuropathic pain behavior in mice: Multiple mechanisms of action	2022	Journal of Ethnopharmacology	283			
1141	Anwar F., Saleem U., rehman A.U., Ahmad B., Ismail T., Mirza M.U., Ahmad S.	Acute Oral, Subacute, and Developmental Toxicity Profiling of Naphthalene 2-Yl, 2-Chloro, 5-Nitrobenzoate: Assessment Based on Stress Response, Toxicity, and Adverse Outcome Pathways	2022	Frontiers in Pharmacology	12			
1142	Ramzan M., Raza S.A., Usman M., Sharma G.D., Iqbal H.A.	Environmental cost of non-renewable energy and economic progress: Do ICT and financial development mitigate some burden?	2022	Journal of Cleaner Production	333			

1143	Shakoor A., Dar A.A., Arif M.S., Farooq T.H., Yasmeen T., Shahzad S.M., Tufail M.A., Ahmed W., Albasher G., Ashraf M.	Do soil conservation practices exceed their relevance as a countermeasure to greenhouse gases emissions and increase crop productivity in agriculture?	2022	Science of the Total Environment	805			
1144	He K., Nadeem M., Habib S., Sedighi H.M., Huang D.	Analytical approach for the temperature distribution in the casting-mould heterogeneous system	2022	International Journal of Numerical Methods for Heat and Fluid Flow	32	3	1168	1182
1145	Bhutta A.I., Ullah M.R., Sultan J., Riaz A., Sheikh M.F.	Impact of Green Energy Production, Green Innovation, Financial Development on Environment Quality: A Role of Country Governance in Pakistan	2022	International Journal of Energy Economics and Policy	12	1	316	326
1146	Butt M.H., Saleem A., Javed S.O., Ullah I., Rehman M.U., Islam N., Tahir M.A., Malik T., Hafeez S., Misbah S.	Rising XDR-Typhoid Fever Cases in Pakistan: Are We Heading Back to the Pre-antibiotic Era?	2022	Frontiers in Public Health	9			
1147	Ahmad S., Mfarrej M.F.B., El-Esawi M.A., Waseem M., Alatawi A., Nafees M., Saleem M.H., Rizwan M., Yasmeen T., Anayat A., Ali S.	Chromium-resistant <i>Staphylococcus aureus</i> alleviates chromium toxicity by developing synergistic relationships with zinc oxide nanoparticles in wheat	2022	Ecotoxicology and Environmental Safety	230			

1148	Bukhari S.A., Yasmin A., Rasul A., Zahoor M.A., Mustafa G., Al Farraj D.A., Darwish N.M., Aleya L., Rehman A.	Identification of Ascorbic Acid and Gallic Acid as Novel Inhibitors of Secreted Frizzled-Related Protein for the Treatment of Obesity-Induced Type 2 Diabetes	2022	Dose-Response	20	1		
1149	Wan X., Jahanger A., Usman M., Radulescu M., Balsalobre-Lorente D., Yu Y.	Exploring the Effects of Economic Complexity and the Transition to a Clean Energy Pattern on Ecological Footprint From the Indian Perspective	2022	Frontiers in Environmental Science	9			
1150	Batool R., Riaz N., Junaid H.M., Waseem M.T., Khan Z.A., Nawazish S., Farooq U., Yu C., Shahzad S.A.	Fluorene-Based Fluorometric and Colorimetric Conjugated Polymers for Sensitive Detection of 2,4,6-Trinitrophenol Explosive in Aqueous Medium	2022	ACS Omega	7	1	1057	1070
1151	Hebali H., Chikh A., Bousahla A.A., Bourada F., Tounsi A., Benrahou K.H., Hussain M., Tounsi A.	Effect of the variable visco-Pasternak foundations on the bending and dynamic behaviors of FG plates using integral HSDT model	2022	Geomechanics and Engineering	28	1	49	64
1152	Awan F.H., Dunnan L., Jamil K., Mustafa S., Atif M., Gul R.F., Guangyu Q.	Mediating Role of Green Supply Chain Management Between Lean Manufacturing Practices and Sustainable Performance	2022	Frontiers in Psychology	12			

1153	Aslam A., Shah S., Abbas G., Rehman A.U., Malhi T.H., Alotaibi N.H., Alzarea A.I., Rasool M.F., Khurram H., Noureen S., Bokhari M.T.S.	Assessment of health-related quality of life in hypertensive hemodialysis patients	2022	PeerJ	9			
1154	Roheen T., Kamal S., Bukhari S.A., Mustafa G., Rehman S.	Isolation and Characterization of Novel Methanogens and sMMO Producing Methanotrophs from Rice Paddy Soil	2022	Pakistan Journal of Zoology	56	2	661	668
1155	Azeem M., Mehrunnisa, Hussain S., Mahmood F., Mahmood A., Shahid M., Ibrahim M., Shahzad T.	Synergistic effect of co-application of biochar and a PGPR, <i>Bacillus cereus</i> , on spinach yield under reduced chemical fertilizer regime	2022	Pakistan Journal of Agricultural Sciences	59	6	973	983
1156	Bilal M., Sharif M., Rasool N., Kanwal I., Ahmad G., Langer P.	COPPER-CATALYZED ARYLATIONS AND HETEROARYLATIONS	2022	Targets in Heterocyclic Systems	26		249	276
1157	Qazaq A., Hussain M., Mujalli M., Tounsi A.	Fundamental computer assessment of ring support with exponent of trigonometric function: Safety geometrical perfection	2022	Advances in Concrete Construction	14	6	381	390
1158	ul Aibdin Z., Nafees M., Rizwan M., Ahmad S., Ali S., Obaid W.A., Alsubeie M.S., Darwish D.B.E., Abeed A.H.A.	Combined effect of Zinc lysine and biochar on growth and physiology of wheat ( <i>Triticum aestivum L.</i> ) to alleviate salinity stress	2022	Frontiers in Plant Science	13			

1159	Hussain K., Khalid Z., Amer M.A., Zaman M., Amir M., Al-Shahwan I.M., Zakri A.M., Al-Saleh M.A.	Identification and molecular characterization of cotton leaf curl Gezira betasatellite and two distinct begomoviruses infecting papaya trees in the Kingdom of Saudi Arabia	2022	Cellular and Molecular Biology	68	9	129	134
1160	Wahla A.Q., Anwar S., Fareed M.I., Ikram W., Ali L., Alharby H.F., Bamagoos A.A., Almaghamsi A.A., Iqbal S., Ali S.	Immobilization of metribuzin-degrading bacteria on biochar: Enhanced soil remediation and bacterial community restoration	2022	Frontiers in Microbiology	13			
1161	Mahmood I., Xia C., Yaseen M.R., Hassan S., Ali A., Razzaq A., Ali A., Hassan R.H.	Impact of e-credit on the efficiency of small rice farmers in Punjab, Pakistan	2022	Pakistan Journal of Agricultural Sciences	59	6	935	946
1162	Mehmood Y., Shahid H., Tariq A., Ali S.O.	Efficacy and safety of a new mometasone furoate nasal spray formulation in patients with acute rhinosinusitis: a randomized clinical trial	2022	Italian Journal of Medicine	16	1	10	14
1163	Mehmood Y., Shahid H.	Efficacy of intranasal fluticasone propionate nano nasal spray in management of chronic rhinitis: a randomized clinical trial	2022	Italian Journal of Medicine	16	1		

1164	Waqas M., Ali Z., Waqas M., Zulafqar A.	Development of Localization-Based Waiter Robot Using RP-LIDAR	2022	2022 16th International Conference on Open Source Systems and Technologies, ICO SST 2022 - Proceedings				
1165	Tahir S.H., Syed N., Qadir A.	Global financial crisis, corruption and financial markets: new evidence from South Asia	2022	International Journal of Trade and Global Markets	16	4	327	348
1166	Nadeem M., Navida M., Ameer K., Iqbal A., Malik F., Nadeem M.A., Fatima H., Ahmed A., Din A.	A comprehensive review on the watermelon phytochemical profile and their bioactive and therapeutic effects	2022	Korean Journal of Food Preservation	29	4	546	576
1167	Haque M.A., Biqiong Z., Arshad M.U., Yasmin N.	Role of uncertainty for FDI inflow: Panel econometric analysis of selected high-income nations	2022	Cogent Economics and Finance	10	1		
1168	Ali S., Ahmed S., Latif M.T.	Correlation between the University Librarians' Information Literacy Skills and Research Support Services	2022	Pakistan Journal of Information Management and Libraries	24		1	27
1169	Kainat S., Arshad M.S., Khalid W., Zubair Khalid M., Koraqi H., Afzal M.F., Noreen S., Aziz Z., Al-Farga A.	Sustainable novel extraction of bioactive compounds from fruits and vegetables waste for functional foods: a review	2022	International Journal of Food Properties	25	1	2457	2476

1170	Shahzad A., Mahboob A., Wang W., Zahra A.T.	Molecular Dynamics Evolution for Thermal Conductivity of Complex Yukawa Liquids	2022	Proceedings of 2022 19th International Bhurban Conference on Applied Sciences and Technology, IBCAST 2022			717	720
1171	Ahmad I., Jamil M.U., Paracha K.N.	Artificial Intelligence-Based Approach for Prediction of Power Transformer Health Index	2022	2022 International Conference on Power, Energy and Innovations, ICPEI 2022				
1172	Ali Z., Waqas M., Waqas M., Shahzad A.	Fast and Low-Cost, Wireless Controlled Smart Shopping Cart with Raspberry Pi and RFID Technology	2022	3rd International Informatics and Software Engineering Conference, IISEC 2022				
1173	Hussain M.	Structural stability of laminated composite material for the effectiveness of half axial wave mode: Frequency impact	2022	Advances in Concrete Construction	14	5	309	315
1174	Shahzad A., Alzaid M., Ammar M., Malik R.A., Ali M.	Cellulose Triacetate/Zinc Oxide Membrane for Bioethanol Recovery via Pervaporation â€	2022	Engineering Proceedings	23	1		
1175	Iqbal M.S., Shah P.A., Syed H.K., Khan M.F.	Development and Characterization of Nimesulide Nanosponges: Solvent Evaporation vs Ultrasonic-Assisted Synthesis	2022	Latin American Journal of Pharmacy	41	12	2502	2508

1176	Mazhar M.W., Yusof N.Y., Shaheen T., Saif S., Raza A., Mazhar F.	Sequence, Secondary Structure, and Phylogenetic Conservation of MicroRNAs in <i>Arabidopsis thaliana</i>	2022	Bioinformatics and Biology Insights	16			
1177	Nej S., Ghosh A., Ahmad S., Kumar J., Ghaffar A., Hussein M.I.	Design and Characterization of 10-Elements MIMO Antenna With Improved Isolation and Radiation Characteristics for mm-Wave 5G Applications	2022	IEEE Access	10		125086	125101
1178	Anwar E., Anjum N., Asim M., Habib M.B., Akbar M., Ali S.	Contribution of psychological burden in life satisfaction among caregivers of HIV positive and general medical patients	2022	Rawal Medical Journal	47	4	803	805
1179	Saddique M., Kausar A., Iqra I., Akhter N., Mujahid N., Parveen A., Zaman Q., Hussain S.	Amino acids application alleviated salinity stress in spinach ( <i>Spinacia oleracea L.</i> ) by improving oxidative defense, osmolyte accumulation, and nutrient balance	2022	Turkish Journal of Agriculture and Forestry	46	6	875	887
1180	Shahid M.N., Islam M.U., Alam N., Ali M.	Time-Varying Return Predictability and Adaptive Behavior in The U.S. Commodity Markets During COVID-19	2022	International Journal of Economics and Management	16	SpecialIssue1	59	80
1181	Hussain M., Alzahrani A.O.M., Khadimallah M.A., Alghamdi S., Fatahi-Vajari A., Tounsi A.	Based on Euler beam theory to evaluate the GHz frequencies versus length-to-radius ratios: Continuum model	2022	Advances in Concrete Construction	14	4	291	298

1182	Jamil S., Sattar T., Ullah M.I., Kafait A.	Doctor-patient communication and its effects on patients' quality of life in public hospitals of Multan city, Pakistan	2022	Rawal Medical Journal	47	4	1022	1025
1183	Qamar B., Saleem S., Maher L.P.	An Examination of the Inverse Relationship Between Dimensions of Political Skill and Interpersonal Conflict at Work: Exploring Perceived Control as a Mediating Factor	2022	Psychological Reports				
1184	Saleem U., Aslam N., Siddique R., Iqbal S., Manan M.	Hepatitis C virus: Its prevalence, risk factors and genotype distribution in Pakistan	2022	European Journal of Inflammation	20			
1185	Khan M.I., Yaqoob S., Madni A., Akhtar M.F., Sohail M.F., Saleem A., Tahir N., Khan K.-U.-R., Qureshi O.S.	Development and In Vitro / Ex Vivo Evaluation of Lecithin-Based Deformable Transfersomes and Transfersome-Based Gels for Combined Dermal Delivery of Meloxicam and Dexamethasone	2022	BioMed Research International	2022			
1186	Younas A., Kiran S., Abrar S., Javed S., Gulzar T.	Ultrasonic-Assisted Extraction and Characterization of Natural Colorants from Plants and Evaluation of Their Therapeutic Properties and Cytotoxicity	2022	Polish Journal of Environmental Studies	31	6	5945	5954
1187	Naeem S., Barkat K., Shabbir M., Khalid I., Anjum I., Shamshad N., Mehmood Y., Khan D.H., Badshah S.F., Syed M.A.,	Fabrication of pH responsive hydrogel blends of chondroitin sulfate/pluronic F-127 for the controlled release of ketorolac: its characterization and acute oral toxicity study	2022	Drug Development and Industrial Pharmacy	48	11	611	622

	Afzal S., Abdullah Z.							
1188	Saleem U., Khalid S., Zaib S., Anwar F., Akhtar M.F., Hussain L., Saleem A., Ahmad B.	Wound Healing Potential and in Silico Appraisal of <i>Convolvulus arvensis</i> L. Methanolic Extract	2022	BioMed Research International	2022			
1189	Abbas R., Nawaz Z., Siddique A.B., Aslam R., Rafique A., Zahoor M.A., Qamar M.U., Ahmad M.Z., Jalees M.M., Qasim M., Alsayeqh A.F.	Molecular Detection of Biofilm Production among Multidrug Resistant Isolates of <i>Pseudomonas aeruginosa</i> from Meat Samples	2022	Pakistan Veterinary Journal	42	4	505	510
1190	Akhtar H.M., Tahsin G., Tanveer H., Tahir F.	Environmentally friendly digital printing on cotton using, synthesized pigmented inkjet inks and comparison of their properties [Imprimare digital Äf ecologic Äf pe bumbac folosind cerneluri inkjet pigmentate sintetizate È™i compararea propriet Äf Èilor acestora]	2022	Industria Textila	73	5	501	510
1191	Mungmumpuntipantip R., Wiwanitkit V.	COVID-19 Vaccination in Cancer Patients: Correspondence	2022	Cancer Control	29			

1192	Azeem M., Mustafa G., Mahrosh H.S.	Virtual screening of phytochemicals by targeting multiple proteins of severe acute respiratory syndrome coronavirus 2: Molecular docking and molecular dynamics simulation studies	2022	International Journal of Immunopathology and Pharmacology	36			
1193	Khalid A., Khalid F., Mahreen N., Hussain S.M., Shahzad M.M., Khan S., Wang Z.	Effect of Spore-Forming Probiotics on the Poultry Production: A Review	2022	Food Science of Animal Resources	42	6	968	980
1194	Mahboob A., Shahzad A., Sohail A., Kashif M., He M.-G.	Dynamical Density of Two-Dimensional Dusty Plasmas	2022	Iranian Journal of Science and Technology, Transaction A: Science				
1195	Parveen S., Awan N.U.H., Farooq F.B., Fanja R., Anjum Q.U.A.	Topological Indices of Novel Drugs Used in Autoimmune Disease Vitiligo Treatment and Its QSPR Modeling	2022	BioMed Research International	2022			
1196	Malik H.A., Sabih R., Khan H., Umair M., Asif M., Asrar A., Asrar M.	SHORT-TERM EFFICACY OF INTRAVITREAL PATIZRA ® (RANIBIZUMAB) IN TREATMENT NAIVE PATIENTS- REAL WORLD EVIDENCE IN PAKISTAN	2022	Journal of Ayub Medical College	34	3	613	616
1197	Waheed A., Ahmad W., Syed N., Farooq U., Khan S.Z., Shahzad M.F.	A path to empower consumersâ€™ lookout: analysing the role of digital strategies on consumersâ€™ intention to buy from the perspective of TBP	2022	International Journal of Electronic Customer Relationship Management	13	4	342	356

1198	Vilela J., Asif M., Marques A.R., Santos J.X., Rasga C., Vicente A., Martiniano H.	Biomedical knowledge graph embeddings for personalized medicine: Predicting disease-gene associations	2022	Expert Systems				
1199	Faheem S., Nahid N., Wiener J., Baheti V., Mazari A., Militky J.	Estimation of Radiant Heat Resistance of Cotton Fabrics Treated with Bio-Based Flame Retardant	2022	Journal of Fiber Bioengineering and Informatics	15	2	67	77
1200	Shahzad T., Iqbal S., Nasir M., Anjum A.A., Imran M., Saeed F., Mahomoodally M.F., Mahmood T., Zengin G., Mushtaq Z., Hussain M., Al Jbawi E.	Comparative analysis of preventive role of different probiotics and prebiotics against the markers of liver damage, oxidative stress markers and inflammatory markers in the non-alcoholic fatty liver disease induced rats	2022	International Journal of Food Properties	25	1	2514	2529
1201	Afzal M.F., Khalid W., Armghan Khalid M., Zubair M., Akram S., Kauser S., Noreen S., Jamal A., Kamran Khan M., Al-Farga A.	Recent industrials extraction of plants seeds oil used in the development of functional food products: A Review	2022	International Journal of Food Properties	25	1	2530	2550
1202	Waleed M., Saeed F., Afzaal M., Niaz B., Raza M.A., Hussain M., Tufail T., Rasheed A., Ateeq H., Al Jbawi E.	Structural and nutritional properties of psyllium husk arabinoxylans with special reference to their antioxidant potential	2022	International Journal of Food Properties	25	1	2505	2513

1203	Rashid F., Ahmad M., Ashfaq U.A., Al-Mutairi A.A., Al-Hussain S.A.	Design, Synthesis and Pharmacological Evaluation of 2-(3-Benzoyl-4-Hydroxy-1,1-Dioxido-2H-Benzo[e] [1,2]thiazin-2-yl)-N-(2-Bromophenyl) Acetamide as Antidiabetic Agent	2022	Drug Design, Development and Therapy	16		4043	4060
1204	Raza M.A., Saeed F., Afzaal M., Imran A., Niaz B., Hussain M., Rasheed A., Kashif Mukhtar M., Waleed M., Al Jbawi E.	Comparative study of cross- and uncross-linked arabinoxylans extracted from maize bran with special reference to their structural and antioxidant potential	2022	International Journal of Food Properties	25	1	2495	2504
1205	Bashir Farooq F., Ul Hassan Awan N., Parveen S., Idrees N., Kanwal S., Abdelhaleem T.A.	Topological Indices of Novel Drugs Used in Cardiovascular Disease Treatment and Its QSPR Modeling	2022	Journal of Chemistry	2022			
1206	Hussain M., Muneer M., Raza R., Jamal M.A., Khosa M.K.	Evaluation of $LaxSr1-xZnyFe1-yO3$ ( $x = 0.54, 0.8$ , $y = 0.2, 0.4$ ) as a promising cobalt free composite cathode for SOFCs	2022	New Journal of Chemistry	7	8		

1207	Abbas M., Gulzar T., Kiran S., Ahmad M.N., Hussain G.	Synthesis and characterization of novel resorcinol based trisazo reactive dye ligand and its different metal complexes for cotton dyeing [Sinteza și caracterizarea noului ligand de colorant reactiv trisazo pe bază de rezorcinol și diferenții săfi complecți metalici pentru vopsirea bumbacului]	2022	Industria Textila	73	4	460	467
1208	Afzaal M., Saeed F., Islam F., Ateeq H., Asghar A., Shah Y.A., Ofoedu C.E., Chacha J.S.	Nutritional Health Perspective of Natto: A Critical Review	2022	Biochemistry Research International	2022			
1209	Aslam B., Khurshid M., Ahmad M., Baloch Z.	A Response to Article “Distribution of Mcr-1 Harboring Hypervirulent Klebsiella pneumoniae in Clinical Specimens and Lytic Activity of Bacteriophage KpnM Against Isolates” [Response to Letter]	2022	Infection and Drug Resistance	15		6601	6602
1210	Faheem S., Nahid N., Wiener J., Mazari A., Baheti V., Militky J.	Textile Flame Retardancy and Valorization of Biobased Materials as Green Flame Retardants	2022	Textile Bioengineering and Informatics Symposium Proceedings, TBIS			675	682

1211	Manzoor U., Waqas H., Muhammad T., Wakif A.	Oldroyd-B nanofluid flow with the features of bioconvection and Cattaneo-Christov model in the presence of gyrotactic motile microorganism	2022	Waves in Random and Complex Media				
1212	Khalid M.A., Hussain S.M., Hussain A.I., Asrar M., Amjad M., Riaz D., Arsalan M.Z.-U.-H.	Effect of lycopene supplementation on nutrient utilization, hematology, antioxidant status and growth performance of <i>Labeo rohita</i> fingerlings fed canola meal-based diet	2022	Pakistan Journal of Agricultural Sciences	59	5	877	883
1213	Mallhi T.H., Habib Khan Y., Abbas G., Shah S., Khurram H., Chand U.R., Riaz M., Faheem H.I., Nisar M.F., Raza A.	Assessment of Knowledge and Perception of Pharmacy Students Regarding Herbal Drugs: a Cross-Sectional Analysis from Pakistan	2022	Latin American Journal of Pharmacy	41	11	2138	2146
1214	Khalid M.A., Hussain S.M., Sultana S., Asrar M., Sharif A.	Impact of different types of biochar supplemented <i>Moringa oleifera</i> seed meal-based diets on nutrient utilization, hematology and growth performance of <i>Cirrhinus mrigala</i> fingerlings	2022	Pakistan Journal of Agricultural Sciences	59	5	849	855
1215	Kanwal A., Parveen B., Ashraf R., Haider N., Ali K.G.	A review on synthesis and applications of some selected Schiff bases with their transition metal complexes	2022	Journal of Coordination Chemistry	75	19-24	2533	2556

1216	Siddique M.H., Muzammil S., Nadeem H., Rasul I., Sabri A.N., Afzal M., Hayat S.	Mitigation of malathion induced toxicity in developing chicken embryo using Zingiber officinale and Curcuma longa extracts	2022	Pakistan Journal of Agricultural Sciences	59	5	811	815
1217	Siddique M.A., Shahzad T., Mahmood F., Azeem F., Hussain S.	Effect of various azo dyes on soil organic matter cycling in three soils of varying texture	2022	Pakistan Journal of Agricultural Sciences	59	5	837	847
1218	Sarwar M., Rasool B.	Seasonal Prevalence and Phenomenal Biology as Tools for Dengue Mosquito Aedes aegypti (Linnaeus) (Diptera: Culicidae) Management	2022	Brazilian Archives of Biology and Technology	65			
1219	Umar M., Muzammil S., Zahoor M.A., Mustafa S., Ashraf A., Hayat S., Ijaz M.U.	Fisetin Attenuates Arsenic-Induced Hepatic Damage by Improving Biochemical, Inflammatory, Apoptotic, and Histological Profile: In Vivo and in Silico Approach	2022	Evidence-based Complementary and Alternative Medicine	2022			
1220	Khalid W., Arshad M.S., Aslam N., Mukhtar S., Rahim M.A., Ranjha M.M.A.N., Noreen S., Afzal M.F., Aziz A., Awuchi C.G.	Food applications of sorghum derived kafirins potentially valuable in celiac disease	2022	International Journal of Food Properties	25	1	2348	2363

1221	Siddeeg A., Afzaal M., Saeed F., Ali R., Shah Y.A., Shehzadi U., Ateeq H., Waris N., Hussain M., Raza M.A., Al-Farga A.	Recent updates and perspectives of fermented healthy super food sauerkraut: a review	2022	International Journal of Food Properties	25	1	2320	2331
1222	Faisal S., Zahid F.M., Kamal S., Shahzad K., Seidu A.-A., Ahinkorah B.O.	Modeling the Factors Associated with Incomplete Immunization among Children	2022	Mathematical Problems in Engineering	2022			
1223	Rashid S., Ashraf R., Bonyah E.	Nonlinear dynamics of the media addiction model using the fractal-fractional derivative technique	2022	Complexity	2022			
1224	Nawaz T., Iqbal M., Khan B.A., Ahmed N., Nawaz A., Rasul A., Rizg W.Y., Jali A.M., Ahmed R.A., Safhi A.Y.	Polycaprolactone based pharmaceutical nanoemulsion loaded with acriflavine: optimization and in vivo burn wound healing activity	2022	Drug Delivery	29	1	3233	3244
1225	Mallhi T.H., Khan Y.H., Shah S., Abbas G., Chand U.R., Khurram H., Abid R., Nasir A., Saeed S., Riaz M., Alishba	Knowledge, Attitude and Practice of Community Pharmacists Regarding Generic Medicines: A National Cross-Sectional Survey	2022	Latin American Journal of Pharmacy	41	10	1962	1970

	Rahim M.A., Umar M., Habib A., Imran M., Khalid W., Lima C.M.G., Shoukat A., Itrat N., Nazir A., Ejaz A., Zafar A., Awuchi C.G., Sharma R., Santana R.F., Emran T.B.	Photochemistry, Functional Properties, Food Applications, and Health Prospective of Black Rice	2022	Journal of Chemistry	2022			
1226	Tusabe F., Tahir I.M., Akpa C.I., Mtaki V., Baryamujura J., Kamau B., Lidoroh S., Kobugabe P.L., Maaga N.O., Bongomin F.	Lessons Learned from the Ebola Virus Disease and COVID-19 Preparedness to Respond to the Human Monkeypox Virus Outbreak in Low-and Middle-Income Countries	2022	Infection and Drug Resistance	15		6279	6286
1227	Hamdani A., Khawar R., Rubab H.	AGGRESSIVE BEHAVIOR AND COPING STRATEGIES AMONG CARDIAC PATIENTS WITH TYPE A AND TYPE B BEHAVIOR PATTERN	2022	Pakistan Heart Journal	55	3	242	246
1228	Bhatti R., Shakeel H., Malik K., Qasim M., Khan M.A., Ahmed N., Jabeen S.	Inorganic Nanoparticles: Toxic Effects, Mechanisms of Cytotoxicity and Phytochemical Interactions	2022	Advanced Pharmaceutical Bulletin	12	4	757	762
1229	Waqas H., Yasmin S., Muhammad T., Khan S.A., Alshehri A.	Â Thermo-Marangoni convection flow of hybrid nanofluid with a melting phenomenon	2022	Waves in Random and Complex Media				
1230								

1231	Rashid S., Kanwal B., Attique M., Bonyah E.	An Efficient Technique for Time-Fractional Water Dynamics Arising in Physical Systems Pertaining to Generalized Fractional Derivative Operators	2022	Mathematical Problems in Engineering	2022			
1232	Siddique M.H., Hayat S., Muzammil S., Ashraf A., Khan A.M., Ijaz M.U., Khurshid M., Afzal M.	Ecofriendly phytosynthesized zirconium oxide nanoparticles as antibiofilm and quorum quenching agents against <i>Acinetobacter baumannii</i>	2022	Drug Development and Industrial Pharmacy	48	9	502	509
1233	Jamil A., Zahoor M.A., Nawaz Z., Siddique A.B., Khurshid M.	Genetic Diversity of <i>Escherichia coli</i> Co harboring mcr -1 and Extended Spectrum Beta-Lactamases from Poultry	2022	BioMed Research International	2022			
1234	Zhang X., Idrees N., Kanwal S., Saif M.J., Saeed F.	Computing Topological Invariants of Deep Neural Networks	2022	Computational Intelligence and Neuroscience	2022			
1235	Hussain L., Aamir N., Hussain M., Asif M., Chauhdary Z., Manzoor F., Siddique R., Riaz M.	Therapeutic Investigation of Standardized Aqueous Methanolic Extract of Bitter Melon ( <i>Momordica charantia</i> L.) for Its Potential against Polycystic Ovarian Syndrome in Experimental Animals' Model: In Vitro and in Vivo Studies	2022	Evidence-based Complementary and Alternative Medicine	2022			
1236	Saleem U., Hussain L., Shahid F., Anwar F., Chauhdary Z., Zafar A.	Pharmacological Potential of the Standardized Methanolic Extract of <i>Prunus armeniaca</i> L. in the Haloperidol-Induced Parkinsonism Rat Model	2022	Evidence-based Complementary and Alternative Medicine	2022			

1237	Sharif A., Ali M.Z., Arshad K., Assaleh K., Imran M.A., Abbasi Q.H.	Knitted Antenna Design for UHF RFID and Wearable IoT Applications	2022	2022 IEEE International Symposium on Antennas and Propagation and USNC-URSI Radio Science Meeting, AP-S/URSI 2022 - Proceedings			123	124
1238	Afzal M.F., Khalid W., Akram S., Khalid M.A., Zubair M., Kauser S., Abdelsamea Mohamedahmed K., Aziz A., Anusha Siddiqui S.	Bioactive profile and functional food applications of banana in food sectors and health: a review	2022	International Journal of Food Properties	25	1	2286	2300
1239	Arif M.A., Inam-Ur-Raheem M., Khalid W., Lima C.M.G., Jha R.P., Khalid M.Z., Santana R.F., Sharma R., Alhasaniah A.H., Emran T.B.	Effect of Antioxidant-Rich Moringa Leaves on Quality and Functional Properties of Strawberry Juice	2022	Evidence-based Complementary and Alternative Medicine	2022			
1240	Akhtar M.F., Ashraf K.M., Saleem A., Sharif A., Zubair H.M., Anwar F.	Antidiabetic Potential and Antioxidant Activity of Olea europaea subsp. Cuspidata (Indian Olive) Seed Extracts	2022	Evidence-based Complementary and Alternative Medicine	2022			

1241	Khosa Q., Zaman Q.U., An T., Ashraf K., Abbasi A., Nazir S., Naz R., Chen Y.	Silicon-mediated improvement of biomass yield and physio-biochemical attributes in heat-stressed spinach ( <i>Spinacia oleracea</i> )	2022	Crop and Pasture Science				
1242	Qurashi S.M., Gilani K.Z., Shabir M., Gulzar M., Alam A.	Soft Relations Applied to the Substructures of Quantale Module and Their Approximation	2022	Complexity	2022			
1243	Iqbal M.S., Kassab Y.W., Shakoor A., Aslam N., Alghamdi Z.D., Alghannam A., Alnajdi S.M., Alotaibi B.A., Assiri A.M., Kaur H.J., Menon S., Paneerselvam G.S.	Comparison of Efficacy and Safety of Epoetin Alfa and Epoetin Beta in Continuous Ambulatory Peritoneal Dialysis Anemic Patients	2022	Latin American Journal of Pharmacy	41	2	392	399
1244	Rashid S., Butt S.I., Hammouch Z., Bonyah E.	An Efficient Method for Solving Fractional Black-Scholes Model with Index and Exponential Decay Kernels	2022	Journal of Function Spaces	2022			
1245	Rasheed A., Ali N., Zafar B., Shabbir A., Sajid M., Mahmood M.T.	Handwritten Urdu Characters and Digits Recognition Using Transfer Learning and Augmentation With AlexNet	2022	IEEE Access	10		102629	102645
1246	Shah S., Aslam A., Chauhdary Z., Abbas G., Rehman A.U., Khan H.U., Maheen S., Khurram H., Chand U.R., Anwar S.,	Knowledge, Attitude, and Practice on Over-the-Counter Drugs among Pharmacy and Medical Students: A Facility-Based Cross-Sectional Study in Punjab, Pakistan	2022	Latin American Journal of Pharmacy	41	2	311	319

	Saleem K., Tahir M.							
1247	Iqbal M.S., Shakoor A., Aslam N., Noreen R., Kassab Y.W., Alahmari A.K., Khan M.F., Ahmed N.J.	Treatment Effectiveness, Disease Outcomes and Biological Response Modifiers-A Repeated-Measure Post-Treatment Insight Among Rheumatoid Arthritis Patients	2022	Latin American Journal of Pharmacy	41	2	400	405
1248	Mohsin B.B., Awan M.U., Javed M.Z., Budak H., Khan A.G., Noor M.A.	Inclusions Involving Interval-Valued Harmonically Co-Ordinated Convex Functions and Raina's Fractional Double Integrals	2022	Journal of Mathematics	2022			
1249	Faisal M., Imran K., Muhammad B.C., Rizwan M., Athar M., Rashid W.K., Arbab J., Haifa A.S.A., Sabry H., Sajid U., Muhammad U.H., Sameer H.Q.	EXOGENOUSLY APPLIED GLYCINEBETAIN ALLEVIATES CHROMIUM TOXICITY IN PEA BY REDUCING CR UPTAKE AND IMPROVING ANTIOXIDANT DEFENSE SYSTEM	2022	Applied Ecology and Environmental Research	20	5	4295	4307
1250	Abid M., Latif W., Nawaz T., Onyango R., Tahir M.	A Nonconventional Auxiliary Information Based Robust Class of Exponential-type Difference Estimators	2022	Mathematical Problems in Engineering	2022			

1251	Khan A., Nadeem M., Imran M., Gulzar N., Ahmad M.H., Tayyab M., Rahim M.A., Awuchi C.G.	Impact of safflower oil derived conjugated linoleic acid supplementation on fatty acids profile, lipolysis and sensory properties of cheddar cheese	2022	International Journal of Food Properties	25	1	2223	2236
1252	Mehdi S., Ahmad F.-U.-D., Lodhi A.H., Khurshid U., Khalid A.A., Sidiq S.S., Hussain L., Baig M.S.	Protective Effects of p-CA Against Acute Liver Damage Induced by LPS/D-GalN in Wistar Albino Rats	2022	Drug Design, Development and Therapy	16		3327	3342
1253	Aslam B., Siddique M.H., Siddique A.B., Shafique M., Muzammil S., Khurshid M., Rasool M.H., Ahmad M., Chaudhry T.H., Amir A., Salman M., Baloch Z., Alturki N.A., Alzamami A.	Distribution of mcr-1 Harboring Hypervirulent Klebsiella pneumoniae in Clinical Specimens and Lytic Activity of Bacteriophage KpnM Against Isolates	2022	Infection and Drug Resistance	15		5795	5811
1254	Maqbool Z., Arshad M.S., Ali A., Aziz A., Khalid W., Afzal M.F., Bangar S.P., Addi M., Hano C., Lorenzo J.M.	Potential Role of Phytochemical Extract from Saffron in Development of Functional Foods and Protection of Brain-Related Disorders	2022	Oxidative Medicine and Cellular Longevity	2022			
1255	Waqas H., Kamran T., Imran M., Muhammad T.	MHD bioconvectional flow of Jeffrey nanofluid with motile microorganisms over a stretching sheet: solar radiation applications	2022	Waves in Random and Complex Media				

1256	Nazeer M.	Development and theoretical analysis of slippery walls flow of third-grade fluid through the convergent symmetric channel	2022	Waves in Random and Complex Media				
1257	Nazeer M., Hussain F., Khan M.I., Khalid K.	Theoretical analysis of electrical double layer effects on the multiphase flow of Jeffrey fluid through a divergent channel with lubricated walls	2022	Waves in Random and Complex Media				
1258	Loh G.O.K., Wong E.Y.L., Tan Y.T.F., Wee H.C., Ng R.S., Syed H.K., Peh K.K.	Simple and high sample throughput LC/ESI-MS/MS method for bioequivalence study of prazosin, a drug with risk of orthostatic hypotension	2022	Drug Development and Industrial Pharmacy	48	9	470	479
1259	Shahzad A., Imran M., Naeem M.N., Raza M.	Numerical Simulation of Reinerâ€“Rivlin Nanofluid Flow under the Influence of Thermal Radiation and Activation Energy over a Rotating Disk	2022	CMES - Computer Modeling in Engineering and Sciences	131	3	1669	1692
1260	Islam F., Noman M., Afzaal M., Saeed F., Ahmad S., Zubair M.W., Zahra S.M., Hussain M., Ateeq H., Awuchi C.G.	Synthesis and Food Applications of Resistant Starch-Based Nanoparticles	2022	Journal of Nanomaterials	2022			
1261	Abbas M.	Reimagining and reproducing the partitions (of 1947 and 1971) in textbooks in Pakistan: a comparative analysis of the Zia and Musharraf regimes	2022	India Review	21	3	393	418

1262	Talat H., Murrium S.K.T.-S., Suleman T., Tallat E., Naveed F., Shah S.J.H., Zulfiqar G.E.H.	Sonographic findings of a gynecological cause of acute pelvic pain – a systematic review	2022	Journal of Ultrasonography	22	90	e183	e190
1263	Jannat M., Kiran S., Yousaf S., Gulzar T., Iqbal S.	Potential Antifungal Effects of D. malabarica Assisted Zinc Oxide and Silver Nanoparticles against Sheath Blight Disease of Rice Caused by Rhizoctonia solani	2022	Polish Journal of Environmental Studies	31	5	4669	4679
1264	Al Qurashi M., Rashid S., Jarad F.	A computational study of a stochastic fractal-fractional hepatitis B virus infection incorporating delayed immune reactions via the exponential decay	2022	Mathematical Biosciences and Engineering	19	12	12950	12980
1265	Ali M., Khan N.R., Subhan Z., Mehmood S., Amin A., Rabbani I., Rehman F.-U., Basit H.M., Syed H.K., Khan I.U., Khan M.S., Khattak S.	Novel Curcumin-Encapsulated $\beta$ -Tocopherol Nanoemulsion System and Its Potential Application for Wound Healing in Diabetic Animals	2022	BioMed Research International	2022			
1266	Butt S.I., Rashid S., Javed I., Khan K.A., Mabela R.M.	New Fractional Estimates of Simpson-Mercer Type for Twice Differentiable Mappings Pertaining to Mittag-Leffler Kernel	2022	Journal of Function Spaces	2022			

1267	Umar A., Liaquat S., Fatima I., Rehman A., Rasool D., Alshammari A., Alharbi M., Rajoka M.S.R., Khurshid M., Ashfaq U.A., Haque A.	Vaccinomics to Design a Multiepitope Vaccine against Legionella pneumophila	2022	BioMed Research International	2022			
1268	Sherazi S.A.M., Alves M.S., Shah M.A., Haris M., Ikram A., Rafique F., Shah G.M., Siddiqui M.F., Saleem U., Wang Q., de Bessa M.E., Pittalà V.	The entrancing relation between diet and gut microbiota, a possible key target to exploit treatment options for depression and anxiety: insights from animal models, human studies and in vitro research â€“ a review	2022	Animal Science Papers and Reports	40	3	263	287
1269	Khalid W., Arshad M.S., Ranjha M.M.A.N., RÃ³zaÅ„ska M.B., Irfan S., Shafique B., Rahim M.A., Khalid M.Z., Abdi G., Kowalczewski P.Å•.	Functional constituents of plant-based foods boost immunity against acute and chronic disorders	2022	Open Life Sciences	17	1	1075	1093
1270	Ahmad S., Barua S., Sheikh Y.A.	A Simple Monopole ISM Band Antenna for On-body Wireless Communication in the Milimetre-Wave range	2022	2022 IEEE International Conference on Electronics, Computing and Communication Technologies, CONECCT 2022				

1271	Imran A., Humiyion M., Arshad M.U., Saeed F., Arshad M.S., Afzaal M., Imran M., Usman I., Ikram A., Naeem U., Hussain M., Al Jbawi E.	Extraction, amino acid estimation, and characterization of bioactive constituents from peanut shell through eco-innovative techniques for food application	2022	International Journal of Food Properties	25	1	2055	2065
1272	Hamdani S.M.Z.H., Jie Z., Hadier S.G., Tian W., Hamdani S.D.H., Danish S.S., Fatima S.U.	Relationship between Moderate-to-Vigorous Physical Activity with Health-Related Physical Fitness Indicators among Pakistani School Adolescents: Yaali-Pak Study	2022	Scientific World Journal	2022			
1273	Abdullah M., Tufail T., Hussain M., Nadeem M., Owais M., Zulkiffal M., Hammad Tanveer M., Al Jbawi E.	Effect of sprouted barley flour on the quality wheat of bread, biscuits and cakes	2022	Cogent Food and Agriculture	8	1		
1274	Afzaal M., Saeed F., Asghar A., Shah Y.A., Ikram A., Ateeq H., Hussain M., Ofoedu C.E., Chacha J.S.	Nutritional and Therapeutic Potential of Soursop	2022	Journal of Food Quality	2022			
1275	Shagari M.S., Ali F., Alotaibi T., Kanwal S., Azam A.	A fixed point result of weakly contractive operators in generalized metric spaces	2022	AIMS Mathematics	7	9	17603	17611

1276	Afzaal M., Saeed F., Ateeq H., Imran A., Yasmin I., Shahid A., Javed A., Shah Y.A., Islam F., Ofoedu C.E., Chacha J.S., Awuchi C.G.	Survivability of probiotics under hostile conditions as affected by prebiotic-based encapsulating materials	2022	International Journal of Food Properties	25	1	2044	2054
1277	Aamir M., Saeed F., Afzaal M., Ahmad A., Hussain M., Ateeq H., Al Jbawi E.	Thermal kinetics of physical and sensory changes in baby carrot under pasteurization conditions	2022	Cogent Food and Agriculture	8	1		
1278	Zerrad F.-E., Taouzari M., Makroum E.M., Ahmad S., Alkurt F.O., Karaaslan M., Islam M.T., Hussein M.I.	Symmetrical and Asymmetrical Breast Phantoms With 3D-Printed Anatomical Structure for Microwave Imaging of Breast Cancer	2022	IEEE Access	10		96896	96908
1279	Iqbal N., Zahoor A.F., Ahmad M., Hafeez F., Suleman M., Barkaat S., Akhtar R., Ahmad R.	Strategies toward the total synthesis of pretubulysin, its fragments and analogues	2022	Synthetic Communications	52	18	1769	1787
1280	Ashraf R., Ijaz Y., Asif M., Haider K.Z., Mahmood T., Owais M.	Classification of Woven Fabric Faulty Images Using Convolution Neural Network	2022	Mathematical Problems in Engineering	2022			
1281	Ahmad S., Barua S., Vinoth C., Akram A., Manzoor B.	Design of a Dual-Band Printed Monopole Antenna for ISM Band Applications	2022	2022 IEEE Wireless Antenna and Microwave Symposium, WAMS				

				2022				
1282	Tahir M., Naz A., Imran M., Waqas H., AkgÄ±l A., Shanak H., Jarrar R., Asad J.	Activation energy impact on unsteady Bio-convection nanomaterial flow over porous surface	2022	AIMS Mathematics	7	11	19822	19845
1283	Azeem M., Asrar M., Jabeen F., Sultana S.	Evaluation of various pest management strategies against fruit fly (Diptera: Tephritidae) on citrus (Citrus reticulate B.)	2022	Pakistan Journal of Agricultural Sciences	59	4	649	654
1284	Tayyab M., Nasir S., Jabeen F., Cheema R.U.R., Yasmeen N.	A study to check the nephrotoxicity and blood biochemistry changes induced by pesticide Bifenthrin in Rabbits	2022	Pakistan Journal of Agricultural Sciences	59	4	643	648
1285	Tamoor M., Bhatti A.R., Farhan M., Miran S.	Design of On-Grid Photovoltaic System Considering Optimized Sizing of Photovoltaic Modules for Enhancing Output Energy	2022	Engineering Proceedings	19	1		
1286	Tahir I.M., Rauf A., Mehboob H., Sadaf S., Alam M.S., Kalsoom F., Bouyahya A., El Allam A., El Omari N., Bakrim S., Akram M., Raza S.K., Emran T.B., Mabkhot Y.N., Zengin G., Derkho	Prognostic significance of programmed death-1 and programmed death ligand-1 proteins in breast cancer	2022	Human Antibodies	30	3	131	150

	M., Natalya S., Shariati M.A.						
1287	Pasha A.Z., Bukhari S.A., Mustafa G., Anjum F., Mahr-Un-Nisa, Qari S.H.	Evaluation of Modified Date Palm ( <i>Phoenix dactylifera L.</i> ) Mucilage as a Potential Pharmaceutical Excipient	2022	Journal of Food Quality	2022		
1288	Farooq F.B., Parveen S., Awan N.U.H., Fanja R.	Omega, Sadhana, Theta, and PI Polynomials of Double Benzonoid Chain	2022	Journal of Mathematics	2022		
1289	Aslam M.R., Muhammad Asif H., Ahmad K., Jabbar S., Hayee A., Sagheer M.S., Rehman J.U., Khalid S., Hashmi A.S., Rajpoot S.R., Sharif A.	Global impact and contributing factors in varicose vein disease development	2022	SAGE Open Medicine	10		
1290	Bilal M., Ali G., Iqbal M.W., Anwar M., Malik M.S.A., Kadir R.A.	Auto-Prep: Efficient and Automated Data Preprocessing Pipeline	2022	IEEE Access	10	107764	107784

1291	Rashid S., Ashraf R., Asif Q.-U.-A., Jarad F.	Novel stochastic dynamics of a fractal-fractional immune effector response to viral infection via latently infectious tissues	2022	Mathematical Biosciences and Engineering	19	11	11563	11594
1292	Sun J., Sarfraz M., Khawaja K.F., Ozturk I., Raza M.A.	The Perils of the Pandemic for the Tourism and Hospitality Industries: Envisaging the Combined Effect of COVID-19 Fear and Job Insecurity on Employees' Job Performance in Pakistan	2022	Psychology Research and Behavior Management	15		1325	1346
1293	Kanwal S., Shagari M.S., Aydi H., Mukheimer A., Abdeljawad T.	Common fixed-point results of fuzzy mappings and applications on stochastic Volterra integral equations	2022	Journal of Inequalities and Applications	2022	1		
1294	Armghan Khalid M., Niaz B., Saeed F., Afzaal M., Islam F., Hussain M., Mahwish, Muhammad Salman Khalid H., Siddeeg A., Al-Farga A.	Edible coatings for enhancing safety and quality attributes of fresh produce: A comprehensive review	2022	International Journal of Food Properties	25	1	1817	1847
1295	Sarwar M., Saleem M.F., Ali B., Saleem M.H., Rizwan M., Usman K., El-Keblawy A., Ali A., Afzal M., Sheteiwy M.S., Ali S.	Application of potassium, zinc and boron as potential plant growth modulators in <i>Gossypium hirsutum</i> L. under heat stress	2022	Turkish Journal of Agriculture and Forestry	46	4	567	584

1296	Mehmood Y., Khan I.U., Shahzad Y., Yousaf A.M., Irfan M., Khalid S.H., Asghar S., Rasul A., Khan N.R.	Mesoporous Silica Nanoparticles-Based Bilayer Tablets: A New Strategy for Co-delivery of Velpatasvir and Sofosbuvir	2022	Latin American Journal of Pharmacy	41	2	283	293
1297	Hussain F., Nazeer M., Ghafoor I., Saleem A., Waris B., Siddique I.	PERTURBATION SOLUTION OF COUETTE FLOW OF CASSON NANOFUID WITH COMPOSITE POROUS MEDIUM INSIDE A VERTICAL CHANNEL	2022	Nanoscience and Technology	13	4	23	44
1298	Tehseen A., Ahmad N., Nisa M.U., Saeed F.	Optimization of bioactive peptides production in multigrain flakes and their antioxidative and inflammatory activity	2022	Food Science and Technology (Brazil)	42			
1299	Mehmood M., Shahzad A., Zafar B., Shabbir A., Ali N.	Remote Sensing Image Classification: A Comprehensive Review and Applications	2022	Mathematical Problems in Engineering	2022			
1300	Khan A.G., Ameen F., Awan M.U., Nonlaopon K.	Some new numerical schemes for finding the solutions to nonlinear equations	2022	AIMS Mathematics	7	10	18616	18631
1301	Habib D., Salamat N., Hussain S., Abdal S., Ali B.	Insight of Riga effects on dynamic of Prandtl nanofuid over a moving wedge via Keller box approach	2022	Waves in Random and Complex Media				
1302	Mansha S., Inam Bhutta A., Antonucci G., Hooy C.-W.	Do Political Connections Matter for Firm Trade Credit?	2022	Emerging Markets Finance and Trade	58	14	4014	4032

1303	Parveen S., Farooq F.B., Awan N.U.H., Fanja R., Choudhary M.F.	Topological Indices of Drugs Used in Rheumatoid Arthritis Treatment and Its QSPR Modeling	2022	Journal of Mathematics	2022			
1304	Zhou H., Qurashi S.M., Rehman M.U., Shabir M., Kanwal R.S., Khalil A.M.	Soft Substructures in Quantales and Their Approximations Based on Soft Relations	2022	Computational Intelligence and Neuroscience	2022			
1305	Butnariu M., Quispe C., Koirala N., Khadka S., Salgado-Castillo C.M., Akram M., Anum R., Yeskaliyeva B., Cruz-Martins N., Kumar M.M.M., Bagiu R.V., Razis A.F.A., Sunusi U., Kamal R.M., Sharifi-Rad J.	Bioactive Effects of Curcumin in Human Immunodeficiency Virus Infection Along with the Most Effective Isolation Techniques and Type of Nanoformulations	2022	International Journal of Nanomedicine	17		3619	3632
1306	Rashid S., Kanwal B., Ahmad A.G., Bonyah E., Elagan S.K.	Novel Numerical Estimates of the Pneumonia and Meningitis Epidemic Model via the Nonsingular Kernel with Optimal Analysis	2022	Complexity	2022			
1307	Sharif A., Ouyang J., Raza A., Hussain S., Nasir M., Arshad K., Assaleh K., Ramzan N., Imran M.A., Abbasi Q.H.	UHF RFID Tag Design Using Theory of Characteristics Modes for Platform-Tolerant and Harsh Metallic Environments	2022	IEEE Journal of Radio Frequency Identification	6		524	533

1308	Yao S.-W., Rashid S., Inc M., Elattar E.E.	On fuzzy numerical model dealing with the control of glucose in insulin therapies for diabetes via nonsingular kernel in the fuzzy sense	2022	AIMS Mathematics	7	10	17913	17941
1309	Jiddah J.A., Noorwali M., Shagari M.S., Rashid S., Jarad F.	Fixed point results of a new family of hybrid contractions in generalised metric space with applications	2022	AIMS Mathematics	7	10	17894	17912
1310	Manzoor A., Azhar Khan M., Afzal A.M., Arshad M.I., Shahzad A., Akbar S., Kashif M., Ashraf G.A., Khan M.Y., Rasul M.N., Shifa M.S., Nasar G., Hussain A.	Dielectric, XPS, and ferromagnetic relaxation studies of Ho-substituted polycrystalline magnetic oxide materials	2022	Ceramics International				
1311	Maalik Z., Nazam M., Hashim M., Baig S.A., Shabbir R., Hussain Z.	Does a greener supply chain lead to enhance organizational performance? Insights from the textile sector of Pakistan [Un lană de aprovizionare mai ecologic duce la o performanță organizațională? Perspective din sectorul textil din Pakistan]	2022	Industria Textila	73	3	307	316
1312	Khalid S., Waqas H., Yasmin S., Muhammad T., Galal A.M.	Hybrid nanofluid to enhance heat transfer with velocity and temperature jump impacts	2022	Waves in Random and Complex Media				

1313	Bader UI Ain H., Tufail T., Javed M., Tufail T., Arshad M.U., Hussain M., Gull Khan S., Bashir S., Al Jbawi E., Abdulaali Saewan S.	Phytochemical profile and pro-healthy properties of berries	2022	International Journal of Food Properties	25	1	1714	1735
1314	Aslam M.F.R., Rafique A., Luqman M.	Diversity and Distribution of Avian Fauna in Relation to Urban Landscape in Faisalabad City, Pakistan (a review)	2022	Journal of Global Innovations in Agricultural Sciences	10	2	86	94
1315	Humayun S., Saleem S., Shabbir R., Shaheen S.	â€œNo Pain No Gainâ€•: Presenteeism Evaluation Through Calling with Job Crafting as a Sensemaking Strategy	2022	Psychology Research and Behavior Management	15		1837	1851
1316	Nasir S., Idrees N., Sadiq A., Bashir Farooq F., Kanwal S., Imran M.	Strongly Multiplicative Labeling of Diamond Graph, Generalized Petersen Graph, and Some Other Graphs	2022	Journal of Mathematics	2022			
1317	Abrudan D.B., Rafi N., Daianu D.C., Kalyar M.N.	Linking green intellectual capital with green innovation: Examining the roles of green dynamic capabilities and 'motivation to achieve legitimacy'	2022	Agricultural Economics (Czech Republic)	68	7	250	258
1318	Amin S., Rehman M.A., Naseem A., Younis J., Asghar S.S.	Analysis of Bismuth (III) Iodide and Dendrimers in Drug Applications	2022	Journal of Chemistry	2022			

1319	Shah M.A., Haris M., Faheem H.I., Hamid A., Yousaf R., Rasul A., Shah G.M., Khalil A.A.K., Wahab A., Khan H., Alhasani R.H., Althobaiti N.A.	Cross-Talk between Obesity and Diabetes: Introducing Polyphenols as an Effective Phytotherapy to Combat the Dual Sword Diabesity	2022	Current Pharmaceutical Design	28	19	1523	1542
1320	Gillani S.M.A.H., Senin A.B.A., Bode J., Muniba, Gillani S.M.A.H.	Bibliometric Analysis of Digital Entrepreneurial Education and Student Intention; Reviewed and Analyzed by VOSViewer from Google Scholar	2022	International Journal of Interactive Mobile Technologies	16	13	48	65
1321	Saleem Z., Rehman K., Akash M.S.H.	Role of Drug Delivery System in Improving the Bioavailability of Resveratrol	2022	Current Pharmaceutical Design	28	20	1632	1642
1322	Yousaf M., Razmovski-Naumovski V., Zubair M., Chang D., Zhou X.	Synergistic Effects of Natural Product Combinations in Protecting the Endothelium Against Cardiovascular Risk Factors	2022	Journal of Evidence-Based Integrative Medicine	27			
1323	Batool J.A., Rehman K., Qader A., Akash M.S.H.	Biomedical Applications of Carbohydrate-based Polyurethane: From Biosynthesis to Degradation	2022	Current Pharmaceutical Design	28	20	1669	1687
1324	Yasir M., Ansari Y., Latif K., Maqsood H., Habib A., Moon J., Rho S.	Machine learning-assisted efficient demand forecasting using endogenous and exogenous indicators for the textile industry	2022	International Journal of Logistics Research and Applications				

1325	Rashid S., Sultana S., Kanwal B., Jarad F., Khalid A.	Fuzzy fractional estimates of Swift-Hohenberg model obtained using the Atangana-Baleanu fractional derivative operator	2022	AIMS Mathematics	7	9	16067	16101
1326	Shah S.A.R., Balsalobre-Lorente D., Radulescu M., Zhang Q., Hussain B.	Revising the tourism-induced environment Kuznets curve hypothesis in top 8 Asian economies: the role of ICT and renewable energy consumption	2022	Journal of Hospitality and Tourism Technology				
1327	Shamim T., Asif H.M., Shaheen G., Sumreen L., Ayaz S., Qureshi T., Ghauri A.O., Ali T., Ahmad M., Sajid F., Khadim I., Tanveer R., Noor R., Nawaz H., Kaleem J.	Anti-diabetic Potential of Indigenous Medicinal Plants of Cholistan Desert, Pakistan: A Review	2022	Review of Diabetic Studies	18	2	93	99
1328	Iftikhar A., Akhtar M.F., Saleem A., Riaz A., Zehravi M., Rahman M.H., Md Ashraf G.	Comparative Potential of Zinc Sulfate, L-Carnitine, Lycopene, and Coenzyme Q10 on Cadmium-Induced Male Infertility	2022	International Journal of Endocrinology	2022			
1329	Yahya Tahir M., Ahmad A., A. Alothman A., Mushab M.S.S., Ali S.	Green Synthesis of Silver Nanoparticles Using Thespesia populnea Bark Extract for Efficient Removal of Methylene Blue (MB) Degradation via Photocatalysis with Antimicrobial Activity and for Anticancer Activity	2022	Bioinorganic Chemistry and Applications	2022			

1330	Saeed S., Zahoor A.F., Ahmad M., Anjum M.N., Akhtar R., Shahzadi I.	Synthetic methodologies for the construction of selenium-containing heterocycles: a review	2022	Phosphorus, Sulfur and Silicon and the Related Elements	197	11	1096	1122
1331	Noureen S., Rehman K., Akash M.S.H.	Natural Immunity Boosters as Therapeutic Interventions in the Era of the COVID-19 Pandemic	2022	Endocrine, Metabolic and Immune Disorders - Drug Targets	22	8	842	851
1332	Masih A., Rafique A., Jabeen F., Naz S.	Detection of Babesia ovis in small ruminants by using microscopic and molecular techniques	2022	Pakistan Journal of Agricultural Sciences	59	3	511	517
1333	Asad M., Rasul A., Shah M.A., Abbas G., Hanif M.	Formulation and Characterization of Self-Emulsifying Drug Delivery Systems to Improve the Oral Delivery of Tobramycin	2022	Latin American Journal of Pharmacy	41	7	1392	1397
1334	Shahzadi I., Zahoor A.F., Parveen B., Rasul A., Raza Z., Ahmad S., Irfan A., El-Hiti G.A.	Acefylline Derivatives as a New Class of Anticancer Agents: Synthesis, Molecular Docking, and Anticancer, Hemolytic, and Thrombolytic Activities of Acefylline-Triazole Hybrids	2022	Journal of Chemistry	2022			
1335	Alharbi K.A.M., Yasmin S., Farooq S., Waqas H., Alwetaishi M., Khan S.U., Al-Turjman F., Elattar S., Khan M.I., Galal A.M.	Thermal outcomes of Williamson pseudo-plastic nanofluid with microorganisms due to the heated Riga surface with bio-fuel applications	2022	Waves in Random and Complex Media				
1336	Ehsan A., Haider K.Z., Faisal S., Zahid F.M., Wangari I.M.	Self-Adaptation Resource Allocation for Continuous Offloading Tasks in Pervasive Computing	2022	Computational and Mathematical Methods in Medicine	2022			

1337	Awan M.U., Akhtar N., RaÃ©ssouli M., Kashuri A., Javed M.Z., Noor M.A.	Some Generalized Fractional Integral Inequalities via Harmonic Convex Functions and Their Applications	2022	Mathematical Problems in Engineering	2022			
1338	Iqbal S.Z., Akbar M., Abdull Razis A.F., Waqas M.	Assessment of patulin in different cultivars of apples, juices, and distribution in decay portion	2022	International Journal of Environmental Analytical Chemistry				
1339	Zreen Z., Hameed A., Kiran S., Farooq T., Zaroog M.S.	A Comparative Study of <i>Diospyros malabarica</i> (Gaub) Extracts in Various Polarity-Dependent Solvents for Evaluation of Phytoconstituents and Biological Activities	2022	BioMed Research International	2022			
1340	Akhtar M.F., Farooq U., Saleem A., Saleem M., Rahman M.H., Ashraf G.M.	Ameliorating Effect of <i>Malva neglecta</i> Wallr on Obesity and Diabetes in Wistar Rats: A Mechanistic Study	2022	BioMed Research International	2022			
1341	Ahmad M.H., Sahar A., Pasha I., Kamran Khan M., Imran M., Muhammad N., Haider H.W.	Monitoring of wheat flour aging process using traditional methods and Fourier transform infrared spectroscopy coupled with chemometrics	2022	International Journal of Food Properties	25	1	1513	1523
1342	Wasim M.S., Habib S., Amjad M., Bhatti A.R., Ahmed E.M., Qureshi M.A.	Battery-Ultracapacitor Hybrid Energy Storage System to Increase Battery Life Under Pulse Loads	2022	IEEE Access	10		62173	62182

1343	Rasool B., Mehmood Z., Ahmad M.F., Iqbal J., Younis T., Munir R.	Host instars preference, density-dependent parasitism and behavioral perspective of parasitoids ( <i>Aphidius colemani</i> , <i>Aphidius matricariae</i> and <i>Aphelinus abdominalis</i> ) in <i>Aphis glycines</i> and <i>Aphis gossypii</i>	2022	Revista Brasileira de Entomologia	66	1		
1344	Shagari M.S., Kanwal S., Aydi H., Gaba Y.U.	Fuzzy Fixed Point Results in Convex $C^{\alpha}$ -Algebra-Valued Metric Spaces	2022	Journal of Function Spaces	2022			
1345	Raza S.H., Shafiq F., Anwar S.	THE INFLUENCE OF SALICYLIC ACID FOLIAR SPRAY ON THE GROWTH, BIOCHEMICAL TRAITS, AND Cd-UPTAKE IN RADISH ( <i>RAPHANUS SATIVUS L.</i> )	2022	Pakistan Journal of Botany	54	5	1707	1713
1346	Ghafar M.A., Akram N.A., Gul B., Pirasteh-Anosheh H.	PHYSIO-BIOCHEMICAL ANALYSES OF SELECTED HALOPHYTES FROM THE SALINE REGIONS OF PAKISTAN AND THEIR POTENTIAL FOR BIOSALINE AGRICULTURE IN ARID ENVIRONMENTS	2022	Pakistan Journal of Botany	54	5	1697	1706
1347	Tassaddiq A., Kanwal S., Perveen S., Srivastava R.	Fixed points of single-valued and multi-valued mappings in sb-metric spaces	2022	Journal of Inequalities and Applications	2022	1		
1348	Hosseinnezhad M., Gharanjig K., Adeel S., Rouhani S., Imani H., Razani N.	The effect of ultrasound on environmentally extraction and dyeing of wool yarns	2022	Journal of Engineered Fibers and Fabrics	17			

1349	Haroon M., Fatima W., Janjua M.R.S.A.	Physicochemical insights into the rational designing of new acceptor molecules by donor bridge modifications for efficient solar cells: In silico chemistry	2022	Journal of Physical Organic Chemistry				
1350	Tahir S.H., Ullah W., Haider M.H., Ullah M.R., Majeed M.	The distinction as an innovative dimension of SERVQUAL model for Islamic banks	2022	International Journal of Business Innovation and Research	28	2	246	262
1351	Muzammil S., Andleeb R., Hayat S., Ijaz M.U., Ashraf A., Zafar N., Naz S., Shaheen M.	Integrating in Silico and in Vitro Approaches to Screen the Antidiabetic Properties from <i>Tabernaemontana divaricata</i> (Jasmine) Flowers	2022	Evidence-based Complementary and Alternative Medicine	2022			
1352	Alqurashi M.S., Rashid S., Kanwal B., Jarad F., Elagan S.K.	A novel formulation of the fuzzy hybrid transform for dealing nonlinear partial differential equations via fuzzy fractional derivative involving general order	2022	AIMS Mathematics	7	8	14946	14974
1353	Rashid S., Sultana S., Idrees N., Bonyah E.	On the Analytical Treatment for the Fractional-Order Coupled Partial Differential Equations via Fixed Point Formulation and Generalized Fractional Derivative Operators	2022	Journal of Function Spaces	2022			
1354	Hussain M., Liaqat I., Ali S., Aftab N., Ulfat M., Naseem S., Urooj, Qamar M.F.	Diversity and Abundance of Delineated Earthworm (Annelida: Clitellata) in Pakistan: A Review	2022	Journal of Oleo Science	71	6	839	844

1355	Razaq A., Masmali I., Garg H., Shuaib U.	Picture fuzzy topological spaces and associated continuous functions	2022	AIMS Mathematics	7	8	14840	14861
1356	Younas A., Hussain L., Shabbir A., Asif M., Hussain M., Manzoor F.	Effects of <i>Fagonia indica</i> on Letrozole-Induced Polycystic Ovarian Syndrome (PCOS) in Young Adult Female Rats	2022	Evidence-based Complementary and Alternative Medicine	2022			
1357	Ahmad A.G., Kaabar M.K.A., Rashid S., Abid M.	A Novel Numerical Treatment of Nonlinear and Nonequilibrium Model of Gradient Elution Chromatography considering Core-Shell Particles in the Column	2022	Mathematical Problems in Engineering	2022			
1358	Yassen M.F., Mahrous Y.M., Nazeer M., Pasha A.A., Hussain F., Khalid K., Nazir M.W.	Theoretical study of transport of MHD peristaltic flow of fluid under the impact of viscous dissipation	2022	Waves in Random and Complex Media				
1359	Zulfiqar F., Malik S.N., Raza M., Ali M.S.	Fourth-Order Hankel Determinants and Toeplitz Determinants for Convex Functions Connected with Sine Functions	2022	Journal of Mathematics	2022			
1360	Rizwan K., Karakaya I., Zubair M., Rasool N.	Palladium catalyzed cross-coupling of 3-methylthiophene-2-carbonyl chloride with aryl/het-aryl boronic acids: a convenient method for synthesis of thienyl ketones	2022	Journal of Sulfur Chemistry	43	5	494	506

1361	Shahzad M.M., Liaquat I., Hussain S.M., Hussain M., Hussain Z., Chaudhary A., Abdullah S., Shah S.Z.H., Ahmad N., Khan M.K.A., Bashir S., Rafique M.T.	Effects of dietary phytase (PHY) levels on nutrient digestibility, mineral absorption and growth performance of <i>Oreochromis niloticus</i> fingerlings fed Moringa based diets	2022	Pakistan Journal of Agricultural Sciences	59	2	269	278
1362	Aslam S., Binyamin M.A.	Characterization of plane to plane map germs by invariants	2022	Hacettepe Journal of Mathematics and Statistics	51	3	743	756
1363	Khalid A., Nawaz M., Iqbal N., Ashraf M.Y.	SILICON FOLIAR APPLICATION IMPROVES WATER STRESS TOLERANCE IN WHEAT ( <i>TRITICUM AESTIVUM L.</i> ) BY MODULATING GROWTH, YIELD AND PHOTOSYNTHETIC ATTRIBUTES	2022	Pakistan Journal of Botany	54	5	1643	1652
1364	Parveen S., Hassan Awan N.U., Mohammed M., Farooq F.B., Iqbal N.	Topological Indices of Novel Drugs Used in Diabetes Treatment and Their QSPR Modeling	2022	Journal of Mathematics	2022			
1365	Abrudan D.B., Daianu D.C., Maticiuc M.D., Rafi N., Kalyar M.N.	Strategic leadership, environmental uncertainty, and supply chain risk: An empirical investigation of the agribusiness industry	2022	Agricultural Economics (Czech Republic)	68	5	171	179
1366	Cheema A., Tariq M., Hafiz A., Khan M.M., Ahmad F., Anwar M.	Prevention Techniques against Distributed Denial of Service Attacks in Heterogeneous Networks: A Systematic Review	2022	Security and Communication Networks	2022			

1367	Noor M.M., Arshad M.S., Ahmad R.S., Imran A., Khalid W., Suleria H.A.R.	Stability and quality improvement of shrimp patties by Asparagus racemosus and gamma irradiation	2022	International Journal of Food Properties	25	1	1328	1342
1368	Anjum N., He J.-H., He C.-H., Ashiq A.	A Brief Review on the Asymptotic Methods for the Periodic Behaviour of Microelectromechanical Systems	2022	Journal of Applied and Computational Mechanics	8	3	1120	1140
1369	Atif M., Alsrhani A., Naz F., Iahthisham-Ul-haq, Imran M., Khalid S.	Role of adenosine receptors in cardiovascular disorders and novel corona virus infection	2022	Rawal Medical Journal	47	2	271	274
1370	Bin-Mohsin B., Awan M.U., Javed M.Z., Kashuri A., Noor M.A.	Fractional integral estimations pertaining to generalized $\hat{\beta}^3$ -convex functions involving Raina's function and applications	2022	AIMS Mathematics	7	8	13633	13663
1371	Abbas A., Ahmad H., Mumtaz M., Ilyas A., Hussan M.	MHD dissipative micropolar fluid flow past stretching sheet with heat generation and slip effects	2022	Waves in Random and Complex Media				
1372	Sultan H., Zafar M.H., Anwer S., Waris A., Ijaz H., Sarwar M.	Real Time Face Recognition Based Attendance System For University Classroom	2022	2nd IEEE International Conference on Artificial Intelligence, ICAI 2022			165	168
1373	Kiran S., Ashraf A., Afzal G., Abrar S., Rahmat M., Asif S.	Green synthesis of magnesium oxide nanoparticles using leaves of Iresine herbstii for remediation of reactive brown 9 dye	2022	Global Nest Journal	24	2	291	296

1374	Bazmi R.R., Asif M., Yaseen H.S., Panichayupakaranant P.	Comparison of anti-inflammatory and analgesic effects of artocarpin-rich Artocarpus heterophyllus extract and artocarpin	2022	Journal of Angiotherapy	6	2	V601	V611
1375	Hussain M., Ali A., Inc M., Sene N., Hussan M.	Impacts of Chemical Reaction and Suction/Injection on the Mixed Convective Williamson Fluid past a Penetrable Porous Wedge	2022	Journal of Mathematics	2022			
1376	Alzarea A.I., Mallhi T.H., Shah S., Abbas G., Khan H.U., Alanazi A.S., Khurram H., Chand U.R., Khan Y.H., Kareem M., Rehman O.U., Faheem H.I.	Assessment of Knowledge and Self-Confidence for Appropriate Antibiotic Therapy, Resistance and Workshop with Undergraduate Pharmacy Students	2022	Latin American Journal of Pharmacy	41	5	944	952
1377	Abbas G., Shah S., Shehzad M.A., Mallhi T.H., Khan Y.H., Iqbal A., Ahmed M.M., Khan S.M., Gulshan S., Shahid S.M., Javed S.	High Performance Liquid Chromatographic (HPLC) Method for the Estimation of Pitavastatin in Pharmaceuticals	2022	Latin American Journal of Pharmacy	41	5	962	966
1378	Islam F., Saeed F., Afzaal M., Ahmad A., Hussain M., Khalid M.A., Saewan S.A., Khashroum A.O.	Applications of green technologies-based approaches for food safety enhancement: A comprehensive review	2022	Food Science and Nutrition				

1379	Mahwish, Saeed F., Afzaal M., Hussain M., Imran M., Nawaz T., Siddeeg A.	Dietary guidelines to boost immunity during pre and post covid-19 conditions	2022	International Journal of Food Properties	25	1	1246	1265
1380	Islam F., Saeed F., Afzaal M., Hussain M., Al Jbawi E., Armghan Khalid M., Asif Khan M.	Nutritional and functional properties of <i>Hyphaene thebaica</i> L. flour: a critical treatise and review	2022	International Journal of Food Properties	25	1	1234	1245
1381	Ashraf H.N., Walayat N., Saleem M.H., Niaz N., Hafeez A., Atiq M.N., Chattha M.S., El-Sheikh M.A., Ali S.	DETERMINATION OF PESTICIDE RESIDUES FROM GRAPES PROCURED FROM DIFFERENT MARKETS USING THROUGH HIGH PERFORMANCE LIQUID CHROMATOGRAPHY (HPLC)	2022	Pakistan Journal of Botany	54	2	737	741
1382	Ahmad A., Wajid A., Saleem M.H., Shehzadi M., Rehan M., Hussaan M., Faheem M., Javed M.T., El-Sheikh M.A., Alshaya H., Ali S.	SIMULATING THE GROWTH AND YIELD OF PEANUT CULTIVARS UNDER TEMPORAL VARIATION USING CROPGRO-PEANUT (DSSAT) MODEL	2022	Pakistan Journal of Botany	54	3	835	842
1383	Usman I., Hussain M., Imran A., Afzaal M., Saeed F., Javed M., Afzal A., Ashfaq I., Al Jbawi E., A. Saewan S.	Traditional and innovative approaches for the extraction of bioactive compounds	2022	International Journal of Food Properties	25	1	1215	1233

1384	Shaheen Z., Asad F., Sultana S., Hussain S.M.	Apparent digestibility coefficients of carbohydrates and enzymes activity in major carps in response to Chromium Chloride Hexahydrate	2022	Israeli Journal of Aquaculture - Bamidgeh	74			
1385	Waqas H., Imran M., Khan S.A., Khan I., Pasha A.A., Irshad K.	Cattaneoâ€“Christov double diffusion and bioconvection in magnetohydrodynamic three-dimensional nanomaterials of non-Newtonian fluid containing microorganisms with variable thermal conductivity and thermal diffusivity	2022	Waves in Random and Complex Media				
1386	Hussain F., Saleem S., Nazeer M., Feroz N., Shahzad Q., Nazir M.W.	A note on the multiphase flow of third grade fluid with wall properties	2022	Waves in Random and Complex Media				
1387	Alqarni M.S., Waqas H., Manzoor U., Muhammad T.	Marangoni transport of Jeffrey nanofluid due to circular horizontal cylinder with motile microorganisms	2022	Waves in Random and Complex Media				
1388	Nabi Z., Talib R., Hanif M.K., Awais M.	Contextual Text Mining Framework for Unstructured Textual Judicial Corpora through Ontologies	2022	Computer Systems Science and Engineering	43	3	1357	1374
1389	Anjum N., Ul Rahman J., He J.-H., Alam M.N., Suleman M.	An Efficient Analytical Approach for the Periodicity of Nano/Microelectromechanical Systems' Oscillators	2022	Mathematical Problems in Engineering	2022			

1390	Mumtaz N., Akhtar M.F., Saleem A., Riaz A.	Harmful Consequences of Proton Pump Inhibitors on Male Fertility: An Evidence from Subchronic Toxicity Study of Esomeprazole and Lansoprazole in Wistar Rats	2022	International Journal of Endocrinology	2022			
1391	Siddiqui S., Parveen S., Arshad S.	Numerical solution of Atangana-Baleanu-Caputo time-space fractional diffusion equation	2022	Arab Journal of Basic and Applied Sciences	29	1	129	137
1392	Adeel S., Hasan M.U., Batool F., Ozomay M., Hosseinnezhad M., Amin N., Hussaan M.	Eco-friendly bio-dyeing of bio-treated nylon fabric using Esfand ( <i>P. harmala</i> ) based yellow natural colorant	2022	Journal of Engineered Fibers and Fabrics	17			
1393	Khalid W., Gill P., Arshad M.S., Ali A., Ranjha M.M.A.N., Mukhtar S., Afzal F., Maqbool Z.	Functional behavior of DHA and EPA in the formation of babies brain at different stages of age, and protect from different brain-related diseases	2022	International Journal of Food Properties	25	1	1021	1044
1394	Ashfaq M., Rasheed A., Ali M., Sajjad M., Rasool B., Shaheen S., Shafiq M., Javed M.A., Anwar A., Haider M.S., Mubashar U.	Identifying and characterizing the main causal pathogen responsible for rice grain discoloration in Pakistan	2022	Pakistan Journal of Agricultural Sciences	59	2	223	230

1395	Al-Zubaidi A., Nazeer M., Hussain F., Saleem S.	Numerical study of squeezing flow past a Riga plate with activation energy and chemical reactions: effects of convective and second-order slip boundary conditions	2022	Waves in Random and Complex Media				
1396	Abbas S., Sharif M.K., Sibt-E-Abbas M., Fikre Tefera T., Sultan M.T., Anwar M.J.	Nutritional and Therapeutic Potential of Sesame Seeds	2022	Journal of Food Quality	2022			
1397	Ahmad M., Khan M., Asif R., Sial N., Abid U., Shamim T., Hameed Z., Iqbal M.J., Sarfraz U., Saeed H., Asghar Z., Akram M., Ullah Q., Younas Q.U.A., Rauf L., Hadi A., Maryam S., Hameed Y., Khan M.R., Tariq E., Saeed S.	Expression Characteristics and Significant Diagnostic and Prognostic Values of ANLN in Human Cancers	2022	International Journal of General Medicine	15	1957	1972	
1398	Khalid W., Ali A., Arshad M.S., Afzal F., Akram R., Siddeeg A., Kousar S., Rahim M.A., Aziz A., Maqbool Z., Saeed A.	Nutrients and bioactive compounds of Sorghum bicolor L. used to prepare functional foods: a review on the efficacy against different chronic disorders	2022	International Journal of Food Properties	25	1	1045	1062

1399	Zafar M.A., Shafique M., Zahoor M.A., Saqalein M., Aslam B., Arshad M.I., Waheed U., Kashif M.	Evaluation of seroprevalence and associated risk factors of toxoplasmosis in sheep and goats in District Jhang-Pakistan	2022	Journal of the Hellenic Veterinary Medical Society	73		3881	3888
1400	Shah S., Hanif M., Khan H.U., Khan F.U., Abbas G., Khurram H., Khames A., Abdelgawad M.A., Said A.S.A., Abourehab M.A.S., Maheen S., Chand U.R., Haris M.	Knowledge, Attitudes and Practices of Pharmacogenomics Among Senior Pharmacy Students: A Cross Sectional Study from Punjab, Pakistan	2022	Pharmacogenomics and Personalized Medicine	15		429	439
1401	Khan I., Zafar H., Chattha M.U., Mahmood A., Maqbool R., Athar F., Alahdal M.A., Bibi F., Mahmood F., Hassan M.U., Qari S.H.	Seed priming with different agents mitigate alkalinity induced oxidative damage and improves maize growth	2022	Notulae Botanicae Horti Agrobotanici Cluj-Napoca	50	1		
1402	Mao J., Huang X., Okla M.K., Abdel-Maksoud M.A., Mubarak A., Hameed Z., Noreen R., Chaudhary A., Ghazanfar S., Liao Y., Hameed Y., Li C.	Risk Factors for TERT Promoter Mutations with Papillary Thyroid Carcinoma Patients: A Meta-Analysis and Systematic Review	2022	Computational and Mathematical Methods in Medicine	2022			

1403	Al Qurashi M., Rashid S., Sultana S., Jarad F., Alsharif A.M.	Fractional-order partial differential equations describing propagation of shallow water waves depending on power and Mittag-Leffler memory	2022	AIMS Mathematics	7	7	12587	12619
1404	Haque M.N., Tazin T., Khan M.M., Faisal S., Ibraheem S.M., Algethami H., Almalki F.A.	Predicting Characteristics Associated with Breast Cancer Survival Using Multiple Machine Learning Approaches	2022	Computational and Mathematical Methods in Medicine	2022			
1405	Nonlaopon K., Awan M.U., Talib S., Budak H.	Parametric generalized $(p, q)$ -integral inequalities and applications	2022	AIMS Mathematics	7	7	12437	12457
1406	Vivas-Cortez M., Awan M.U., Rafique S., Javed M.Z., Kashuri A.	Some novel inequalities involving Atangana-Baleanu fractional integral operators and applications	2022	AIMS Mathematics	7	7	12203	12226
1407	Aslam A., Bhatti A.R., Fazal R., Mumtaz T., Manzoor H.U.	Fault Detection and Protection Methodologies for High Voltage AC Transmission Lines	2022	Pakistan Journal of Engineering and Applied Sciences	30		75	86
1408	Nazeer M., Saleem S., Hussain F., Rafiq M.U.	Numerical solution of gyrotactic microorganism flow of nanofluid over a Riga plate with the characteristic of chemical reaction and convective condition	2022	Waves in Random and Complex Media				

1409	Yusaf A., Usman M., Mansha A., Siddiq M., Amjad Z., Irshad S., Sultana H.	Self-organised surfactant assemblies as nanostructured dye carriers: a mixed micellar comparative approach for enhanced dye solubilisation	2022	International Journal of Environmental Analytical Chemistry				
1410	Mumtaz R., Zubair M., Khan M.A., Muzammil S., Siddique M.H.	Extracts of Eucalyptus alba Promote Diabetic Wound Healing by Inhibiting $\alpha$ -Glucosidase and Stimulating Cell Proliferation	2022	Evidence-based Complementary and Alternative Medicine	2022			
1411	Umer M., Khan N.M., Razaq Z., Nissa M.U., Anwar N., Ali M.A., Bhatti A.M., Khan M., Abbas A.	BIO-HERBICIDES: DEVELOPMENT, USE AND ELUCIDATION OF THE FACTORS AFFECTING THEIR EFFICACY	2022	Plant Protection	6	1	75	84
1412	Irfan M., Ali M., Noreen R., Aslam N., Amin U.-E., Syed H.K., Khan I.U., Shah P.A., Iqbal M.S., Jamil M., Asghar S.	Simultaneous Determination of Doxycycline Hyclate and Fusidic Acid by RP-HPLC in Bulk and Microemulsion Formulation	2022	Latin American Journal of Pharmacy	41	4	795	803
1413	Hassan Shah S.H., Noor S., Bayiz Ahmad A., Saleem Butt A., Lei S.	Retrospective view and thematic analysis of value co-creation through bibliometric analysis	2022	Total Quality Management and Business Excellence	33	45481	752	776
1414	Liew K.B., Janakiraman A.K., Sundarapandian R., Khalid S.H., Razzaq F.A., Ming L.C., Khan A., Kalusalingam A., Ng P.W.	A review and revisit of nanoparticles for antimicrobial drug delivery	2022	Journal of Medicine and Life	2022	3	328	335

1415	Noreen S., Raza M., Deniz E., Malik S.N.	On the Janowski Starlikeness of the Coulomb Wave Functions	2022	Journal of Function Spaces	2022			
1416	Kanwal S., Azam A., Shami F.A.	On Coincidence Theorem in Intuitionistic Fuzzy b-Metric Spaces with Application	2022	Journal of Function Spaces	2022			
1417	Hussain W.A., Zhang Z., Ilyas M., Akram S., Ali M.R.	An empirical investigation on the cultivation and management of international postgraduates at five universities located in Wuhan, China	2022	Cogent Education	9	1		
1418	Faouri Y., Ahmad S., Naseer S., Alhammami K., Awad N., Ghaffar A., Hussein M.I.	Compact Super Wideband Frequency Diversity Hexagonal Shaped Monopole Antenna with Switchable Rejection Band	2022	IEEE Access	10		42321	42333
1419	Nasir S., Awan N.U.H., Farooq F.B., Parveen S.	Topological indices of novel drugs used in blood cancer treatment and its QSPR modeling	2022	AIMS Mathematics	7	7	11829	11850
1420	Kanwal S., Hanif U., Noorwali M.E., Alam M.A.	Existence of $\hat{\pm}l$ -Fuzzy Fixed Points of L- Fuzzy Mappings	2022	Mathematical Problems in Engineering	2022			
1421	Javed I., Tang X., Saleem M.A., Sarwar M.U., Tariq M., Shivachi C.S.	3D Localization for Mobile Node in Wireless Sensor Network	2022	Wireless Communications and Mobile Computing	2022			
1422	Shagari M.S., Rashid S., Jarad F., Mohamed M.S.	Interpolative contractions and intuitionistic fuzzy set-valued maps with applications	2022	AIMS Mathematics	7	6	10744	10758

1423	Vivas-Cortez M., Javed M.Z., Awan M.U., Kashuri A., Noor M.A.	Generalized (p, q)-analogues of Dragomir-Agarwalâ€™s inequalities involving Rainaâ€™s function and applications	2022	AIMS Mathematics	7	6	11464	11486
1424	Abbas H., Nahid N., Rehman M.S.N.U., Shaheen T., Liaqaut S.	Detection of fungal pathogen, Alternaria alternata associated with mungbean and its management	2022	Pakistan Journal of Agricultural Sciences	59	1	55	62
1425	Amjad S., Younas M., Anwar M., Shaheen Q., Shiraz M., Gani A.	Data Mining Techniques to Analyze the Impact of Social Media on Academic Performance of High School Students	2022	Wireless Communications and Mobile Computing	2022			
1426	Kamran T., Imran M., Naeem M.N., Raza M.	Bioconvection Cross Diffusion Effects on MHD Flow of Nanofluids over Three Different Geometries with Melting	2022	CMES - Computer Modeling in Engineering and Sciences	131	2	1023	1039
1427	Siddiqui M.Z., Sheraz M., Toor U.A., Anus A., Mahmood A., Haseeb M., Ibrahim M., Khoo K.S., Devadas V.V., Mubashir M., Ullah S., Show P.L.	Recent approaches on the optimization of biomass gasification process parameters for product H2 and syngas ratio: a review	2022	Environment, Development and Sustainability				
1428	Ikram A., Saeed F., Afzaal M., Abdullah M., Niaz B., Asif Khan M., Hussain M., Adnan Nasir A., Siddeeg A.	Comparative study of biochemical properties, anti-nutritional profile, and antioxidant activity of newly developed rye variants	2022	International Journal of Food Properties	25	1	608	616

1429	Ullah S., Talib M.R., Rana T.A., Hanif M.K., Awais M.	Deep Learning and Machine Learning-Based Model for Conversational Sentiment Classification	2022	Computers, Materials and Continua	72	2	2323	2339
1430	Mustafa G., Mehmood R., Mahrosh H.S., Mehmood K., Ahmed S.	Investigation of Plant Antimicrobial Peptides against Selected Pathogenic Bacterial Species Using a Peptide-Protein Docking Approach	2022	BioMed Research International	2022			
1431	Ahmad J., Asghar S., Asif M., Irfan M., Khan I.U., Khan W.H., Shah P.A., Saleem M., Yusra, Iqbal M.S., Syed H.K.	Encapsulation of Piroxicam in Microemulsion to Avoid Gastric Irritation	2022	Latin American Journal of Pharmacy	41	3	666	675
1432	Habeeb E., Aldosari S., Saghir S.A., Cheema M., Momenah T., Husain K., Omidi Y., Rizvi S.A.A., Akram M., Ansari R.A.	Role of environmental toxicants in the development of hypertensive and cardiovascular diseases	2022	Toxicology Reports	9		521	533
1433	Pandey K., Hanif M., Ameer N., Mahmood K., Abid U., Rana H.L., Batool F., Abbas G., Saadullah M., Rasool S.	Comparison of Hydrophilic and Lipophilic Surfactants for the Improvement of Solubility of BCS Class II Drug by First Generation Solid Dispersion Method	2022	Latin American Journal of Pharmacy	41	3	644	651
1434	Asghar S., Shoukat Z., Mehmood H.Q., Khalid S.H., Khan I.U., Khan S.-	Design of pH-Responsive Solid Dispersion of Piroxicam for Increased Solubility and Lower Gastric Side Effects	2022	Latin American Journal of Pharmacy	41	3	521	526

	U.-D., Iqbal M.S.							
1435	Zubair M., Hanif M.K., Alabdulkreem E., Ghadi Y., Khan M.I., Sarwar M.U., Hanif A.	A Deep Learning Approach for Prediction of Protein Secondary Structure	2022	Computers, Materials and Continua	72	2	3705	3718
1436	Vivas-Cortez M., Awan M.U., Talib S., Ye G., Noor M.A.	Fractional identities involving exponential kernel and associated fractional trapezium like inequalities	2022	AIMS Mathematics	7	6	10195	10214
1437	Rashid S., SÃ¡inchez Y.G., Singh J., Abualnaja K.M.	Novel analysis of nonlinear dynamics of a fractional model for tuberculosis disease via the generalized Caputo fractional derivative operator (case study of Nigeria)	2022	AIMS Mathematics	7	6	10096	10121
1438	Manzoor U., Muhammad T., Farooq U., Waqas H.	Investigation of thermal stratification and nonlinear thermal radiation in Darcy-Forchheimer transport of hybrid nanofluid by rotating disk with Marangoni convection	2022	International Journal of Ambient Energy	43	1	6724	6731
1439	Nida B., Tufail M.S., Saleem S.	â€˜Violating my home boundaries makes me dislike my jobâ€™: a multiple mediation model	2022	Economic Research-Ekonomska Istrazivanja	35	1	6626	6647

1440	Rashid S., Ashraf R., Bonyah E.	On Analytical Solution of Time-Fractional Biological Population Model by means of Generalized Integral Transform with Their Uniqueness and Convergence Analysis	2022	Journal of Function Spaces	2022			
1441	Kanwal S., Hanif U., Noorwali M.E., Alam M.A.	On Fixed-Point Results of Generalized Contractions	2022	Journal of Function Spaces	2022			
1442	Khan D., Rasool B., Gulzar A., Tariq M., Khaliq S., Haq I.U., Ali S.	Age-Stage, Two-Sex Life Table Study of the Effects of Sub-Lethal Concentrations of Novaluron on <i>Earias vittella</i> (Lepidoptera: Noctuidae)	2022	International Journal of Agriculture and Biology	27	2	147	153
1443	Mazhar M.W., Raza A., shaheen T., Zubair M., Mahmood J., Tahir H., Saif S., Mazhar F.	Detection of SARS-CoV-2 by using real-time PCR nasopharyngeal swabs in suspected patients and their clinical medication	2022	Sensors International	3			
1444	Manzoor F., Un Nisa M., Hussain H.A., Anwar H., Ahmad N., Umbreen H.	Therapeutic potential of hydrolysable tannin on weight management oxidative stress and reproductive health in polycystic rats	2022	Food Science and Technology (Brazil)	42			
1445	Fatima T., Naureen B., Buzdar M.A.	Individual differences in religiosity and its influences on psychological capital	2022	Mental Health, Religion and Culture	25	2	162	176

1446	Khan N.M., Masoud M.S., Baig S.M., Qasim M., Chang J.	Identification of Pathogenic Mutations in Primary Microcephaly- (MCPH-) Related Three Genes CENPJ, CASK, and MCPH1 in Consanguineous Pakistani Families	2022	BioMed Research International	2022			
1447	Noor R., Zahoor A.F., Naqvi S.A.R., ul Haq A., Akhtar R.	Synthetic potential of ring expansions of 5-membered carbo- & heterocycles: A review	2022	Synthetic Communications	52	7	949	973
1448	Bilal Y., Shahid M., Mahmood F., Shahzad T., Hussain S.	Characterization of Rhizospheric Bacillus Strains SG36 and SG42 for Decolorization of Reactive Yellow 2 Dye and Vigna radiata Growth Promotion in Dye Contaminated Soil	2022	International Journal of Agriculture and Biology	27	1	8	18
1449	Khan M.I., Hanif M.K., Talib R.	Caricature Face Photo Facial Attribute Similarity Generator	2022	Complexity	2022			
1450	Kumar R., Gupta G., Gulzar M., Pamucar D., Gandotra N., Alam M.A.	Reliability Analysis of Poll Data with Novel Entropy Information Measure in Multicriteria Decision-Making Based upon Picture Fuzzy Environment	2022	Mathematical Problems in Engineering	2022			
1451	Abbas Z., Nazir H.Z., Akhtar N., Abid M., Riaz M.	Non-parametric progressive signed-rank control chart for monitoring the process location	2022	Journal of Statistical Computation and Simulation	92	12	2596	2622

1452	Arogundade O., Akanni A., Misra S., Opanuga T., Tinubu O., Akram M., Oluranti J.	Performance Evaluation of Machine Learning Techniques for Prescription of Herbal Medicine for Obstetrics and Gynecology Problems	2022	Lecture Notes in Networks and Systems	419 LNNS		842	851
1453	Manzoor M.F., Shabbir U., Gilani S.M., Sameen A., Ahmad N., Siddique R., Ahmed Z., Qayyum A., Rehman A.	Characterization of bioactive fatty acids and oxidative stability of microwave vacuum dried fish powder supplemented extruded product	2022	Food Science and Technology (Brazil)	42			
1454	Raza M.A., Aslam M., Farooq M., Sherwani R.A.K., Bhatti S.H., Ahmad T.	A new nonparametric composite exponentially weighted moving average sign control chart	2022	Scientia Iranica	29	1 E	290	302
1455	Naeem S., Ahmad N., Imran M., Hussain S.M.	Development and storage stability of conjugated linoleic acid fortified yogurt	2022	Food Science and Technology (Brazil)	42			
1456	Naeem M., Mahr-Un-nisa, Ahmad N., Imran M., Anwar H., Manzoor M.F.	Preparation of weaning foods by replacing plant proteins with egg protein	2022	Food Science and Technology (Brazil)	42			
1457	Irfan M., Javed M., Bhatti S.H.	Difference-type-exponential estimators based on dual auxiliary information under simple random sampling	2022	Scientia Iranica	29	1 E	343	354

1458	Ahmad S., Ijaz U., Naseer S., Ghaffar A., Qasim M.A., Abrar F., Parchin N.O., See C.H., Abd-Alhameed R.	A Jug-Shaped CPW-Fed Ultra-Wideband Printed Monopole Antenna for Wireless Communications Networks	2022	Applied Sciences (Switzerland)	12	2		
1459	Mazhar M.W., Akram R., Shahid A.	Foliar application of iron glutamate improves yield and growth of tomatoes compared to iron sulphate and L-glutamate	2022	International Journal of Vegetable Science	28	6	511	520
1460	Hamza M., Akbar M.A., Alsanad A.A., Alsuwaidan L., Alsagri H.S., Al-Alshaikh H.A., Kanwal M.	Decision-Making Framework of Requirement Engineering Barriers in the Domain of Global Healthcare Information Systems	2022	Mathematical Problems in Engineering	2022			
1461	Mustafa R.G., Dr Saiqa A., DomÁnguez J., Jamil M., Manzoor S., Wazir S., Shaheen B., Parveen A., Khan R., Ali S., Ali N.M., Jalal F., Raja S.A.	Therapeutic Values of Earthworm Species Extract from Azad Kashmir as Anticoagulant, Antibacterial, and Antioxidant Agents	2022	Canadian Journal of Infectious Diseases and Medical Microbiology	2022			
1462	Waseem M., Akhtar S., Ahmad N., Ismail T., Lazarte C.E., Hussain M., Manzoor M.F.	Effect of Microwave Heat Processing on Nutritional Indices, Antinutrients, and Sensory Attributes of Potato Powder-Supplemented Flatbread	2022	Journal of Food Quality	2022			
1463	Waqas H., Yasmin S., Althobaiti N., Bonyah E., Alshehri A., Shah Z.	Evaluating the Higher-Order Slip Consequence in Bioconvection Nanofluid Flow Configured by a Variable Thick Surface of Disk	2022	Journal of Nanomaterials	2022			

1464	Ahmad S., Khan S., Manzoor B., Soruri M., Alibakhshikenari M., Dalarsson M., Falcone F.	A Compact CPW-Fed Ultra-Wideband Multi-Input-Multi-Output (MIMO) Antenna for Wireless Communication Networks	2022	IEEE Access	10		25278	25289
1465	Rafique A., Nasir S., Ashraf A., Nawaz Z., Zahid F.M., Abbas A., Masood S.	Sero-Surveillance and Risk Factors Analysis of Caprine Toxoplasmosis in Faisalabad Punjab, Pakistan	2022	Pakistan Veterinary Journal	42	1	102	106
1466	Babale S.A., Ishfaq M.K., Raza A., Nasir J., Fayyaz A., Ijaz U.	Compact Multibeam Array with Miniaturized Butler Matrix for 5G Applications	2022	Computers, Materials and Continua	72	1	925	937
1467	Mohsin M., Jamil K., Naseem S., Sarfraz M., Ivascu L.	Elongating Nexus Between Workplace Factors and Knowledge Hiding Behavior: Mediating Role of Job Anxiety	2022	Psychology Research and Behavior Management	15		441	457
1468	Waqas H., Farooq U., Muhammad T., Manzoor U.	Shear thinning and shear thickening aspects in magnetized 3D cross-nanofluid flow with activation energy and motile microorganisms	2022	Waves in Random and Complex Media				
1469	Liani M., Moulay N., Bourada F., Addou F.Y., Bourada M., Tounsi A., Hussain M.	A nonlocal integral Timoshenko beam model for free vibration analysis of SWCNTs under thermal environment	2022	Advances in Materials Research (South Korea)	11	1		

1470	Ahmad M., Siddique A.B., Muzammil S., Shafique M., Nawaz Z., Khurshid M., Rasool M.H., Jalees M.M., Sarwar N., Aslam B.	Occurrence of Hypervirulent Klebsiella pneumoniae in Clinical Settings and Lytic Potential of Bacteriophages Against the Isolates	2022	Jundishapur Journal of Microbiology	15	1		
1471	Ullah F., Tahir M., Naz S., Khan N.A., Ullah Khan R.	In vitro efficacy and ameliorating effect of <i>Moringa oleifera</i> on growth, carcass, stress and digestibility of nutrients in <i>Escherichia coli</i> -infected broilers	2022	Journal of Applied Animal Research	50	1	118	124
1472	Zhao W., Du Y., Ashfaq S., Ali S., Alanazi A.M., Santi M.	Evaluation of the Efficacy, Biocompatibility, and Permeation of Bupivacaine-Loaded Poly(epsilon-caprolactone) Nano-Capsules as an Anesthetic	2022	Journal of biomedical nanotechnology	18	1	268	276
1473	Rashid S., Ashraf R., Jarad F.	Strong interaction of Jafari decomposition method with nonlinear fractional-order partial differential equations arising in plasma via the singular and nonsingular kernels	2022	AIMS Mathematics	7	5	7936	7963
1474	Saddique M.S., Habib S., Haroon S.S., Bhatti A.R., Amin S., Ahmed E.M.	Optimal Solution of Reactive Power Dispatch in Transmission System to Minimize Power Losses Using Sine-Cosine Algorithm	2022	IEEE Access	10		20223	20239
1475	Gul U., Khan M.I., Madni A., Sohail M.F., Rehman M., Rasul A., Peltonen L.	Olive oil and clove oil-based nanoemulsion for topical delivery of terbinafine hydrochloride: inÂ vitro and ex vivo evaluation	2022	Drug Delivery	29	1	600	612

1476	Ali I., Asif M., Hamid I., Sarwar M.U., Khan F.A., Ghadi Y.	A word embedding technique for sentiment analysis of social media to understand the relationship between Islamophobic incidents and media portrayal of Muslim communities	2022	PeerJ Computer Science	8			
1477	Hameed A., Ahmad R.S., Imran A., Yasmin A., Naqvi S.A.R.	A randomized controlled trial on albino rats treated with chicory plant to improve liver efficiency	2022	Pakistan Journal of Pharmaceutical Sciences	35	1	247	252
1478	Zia M.A., Khosa M.K., Muneer M., Zia K.M., Saif M.J.	Antimicrobial, selective antibiofilm, and antioxidant properties of plasticized PMMA/PVC and zinc oxide nano filler for biomedical applications	2022	Pakistan Journal of Pharmaceutical Sciences	35	1	233	238
1479	Waheed M., Mehreen A., Ishtiaq S., Saleem M., Kanwal U.	Evaluation of Conocarpus erectus against multidrug resistant <i>Staphylococcus aureus</i> : Cell to animal study	2022	Pakistan Journal of Pharmaceutical Sciences	35	1	273	280
1480	Shah A.A., Ahmad I., Shafique M., Siddique A.B., Aslam B., Qamar M.U.	Antibacterial activity of silver nanoparticles against carbapenem-resistant <i>Acinetobacter baumannii</i> clinical isolates	2022	Pakistan Journal of Pharmaceutical Sciences	35	1	203	208
1481	Noreen R., Aziz H., Hafeez F., Kamal S., Zahoor A.F., Haroon-Ur-Rashid, Parveen B., Akhtar R.	Facile synthesis, antibacterial and protease inhibition studies of $\beta$ -amino alcohols prepared via ring opening of epoxides	2022	Pakistan Journal of Pharmaceutical Sciences	35	1	177	182

1482	Hussain M., Ullah Khan A., Saeed F., Afzaal M., Mushtaq Z., Niaz B., Hussain S., Mohamed A.A., Alamri M.S., Anjum F.M.	Physicochemical characterization of cereal bran cell wall with special reference to its rheological and functional properties	2022	International Journal of Food Properties	25	1	305	314
1483	Tariq M., Jameel F., Ijaz U., Abdullah M., Rashid K.	Biofertilizer microorganisms accompanying pathogenic attributes: a potential threat	2022	Physiology and Molecular Biology of Plants	28	1	77	90
1484	Afzal G., Ahmad H.I., Hussain R., Jamal A., Kiran S., Hussain T., Saeed S., Nisa M.U.	Bisphenol A Induces Histopathological, Hematobiochemical Alterations, Oxidative Stress, and Genotoxicity in Common Carp ( <i>Cyprinus carpio L.</i> )	2022	Oxidative Medicine and Cellular Longevity	2022			
1485	Ahmad S., Manzoor B., Naseer S., Santos-Valdivia N., Ghaffar A., Abbasi M.I.	X-Shaped Slotted Patch Biomedical Implantable Antenna for Wireless Communication Networks	2022	Wireless Communications and Mobile Computing	2022			
1486	Javed S., Faisal M., Raza Z.A., Rehman A., Shahid M.	ISOLATION AND CHARACTERIZATION OF INDIGENOUS BIOSURFACTANT PRODUCING BACILLUS AND STAPHYLOCOCCUS spp. DURING MOTOR OIL DEGRADATION	2022	Applied Ecology and Environmental Research	20	1	79	102

1487	Ahmad M.H., Saeed N., Imran M., Kamran Khan M., Muhammad N., Sahar A., Khan M.I.	Rapid and nondestructive characterization of multiple frying sunflower oil blend using fourier transform infrared spectroscopy and chemometrics	2022	International Journal of Food Properties	25	1	214	226
1488	Sarwar S., Waheed R., Farooq M.U., Sarwar S.	Investigate solutions to mitigate CO2 emissions: the case of China	2022	Journal of Environmental Planning and Management	65	11	2054	2080
1489	Hanif M.K., Ashraf N., Sarwar M.U., Adinew D.M., Yaqoob R.	Employing Machine Learning-Based Predictive Analytical Approaches to Classify Autism Spectrum Disorder Types	2022	Complexity	2022			
1490	Tariq M., Ahmad B., Adnan M., Mian I.A., Khan S., Fahad S., Saleem M.H., Ali M., Mussarat M., Ahmad M., Romman M., Chattha M.S., El-Sheikh M.A., Ali S.	Improving boron use efficiency via different application techniques for optimum production of good quality potato ( <i>Solanum tuberosum L.</i> ) in alkaline soil	2022	PLoS ONE	17	45292		
1491	Bhunia S., Ghorai G., Xin Q., Gulzar M.	On the Algebraic Attributes of $(\hat{\pm}, \hat{l}^2)$ -Pythagorean Fuzzy Subrings and $(\hat{\pm}, \hat{l}^2)$ -Pythagorean Fuzzy Ideals of Rings	2022	IEEE Access	10		11048	11056

1492	Ullah H., Bashir K., Idrees M., Ullah A., Hassan N., Khan S., Nasir B., Nadeem T., Ahsan H., Khan M.I., Ali Q., Muhammad S., Afzal M.	Phylogenetic analysis and antimicrobial susceptibility profile of uropathogens	2022	PLoS ONE	17	45292		
1493	Munir R., Mashood U., Asghar S., Khan I.U., Irfan M., Inam S., Islam N., Ajaz N., Hassan S.F., Anwar S., Shah P.A., Saleem M., Iqbal M.S., Syed H.K.	Solubility and Dissolution Enhancement of Dexibuprofen by Inclusion Complexation with Cyclodextrin	2022	Latin American Journal of Pharmacy	41	1	235	243
1494	Sharifi-Rad J., Quispe C., Kumar M., Akram M., Amin M., Iqbal M., Koirala N., Sytar O., Kregiel D., Nicola S., Ertani A., Victoriano M., Khosravi-Dehaghi N., Martorell M., Alshehri M.M., Butnariu M., Pentea M., Rotariu L.S., Calina D., Cruz-Martins N., Cho W.C.	Hyssopus Essential Oil: An Update of Its Phytochemistry, Biological Activities, and Safety Profile	2022	Oxidative Medicine and Cellular Longevity	2022			

1495	Elkorany A.S., Mousa A.N., Ahmad S., Saleeb D.A., Ghaffar A., Soruri M., Dalarsson M., Alibakhshikenari M., Limiti E.	Implementation of a Miniaturized Planar Tri-Band Microstrip Patch Antenna for Wireless Sensors in Mobile Applications	2022	Sensors	22	2		
1496	Rafique A., Rasheed R., Shamim S., Ijaz M., Murtaza G.	A Review on Nuclear Imaging as a Promising Modality for Efficient Diagnosis of Tuberculosis	2022	Current Medical Imaging	18	1	18	31
1497	Kanwal S., Kattan D., Perveen S., Islam S., Shagari M.S.	Existence of Fixed Points in Fuzzy Strong b-Metric Spaces	2022	Mathematical Problems in Engineering	2022			
1498	Bokhari T.H., Mustafa G., Ahmed N., Usman M., Akram N., Ul Haq A., Salman M., Naz S., Al-Fawzan F.F., Alissa S.A., Iqbal M., Nazir A.	Degradation of a Pigment Red 238 using UV, UV/H <sub>2</sub> O <sub>2</sub> , UV/H <sub>2</sub> O <sub>2</sub> /SnO <sub>2</sub> and Fenton Processes	2022	Polish Journal of Environmental Studies	31	1	619	623
1499	Saddique F.A., Ahmad M., Ashfaq U.A., Muddassar M., Sultan S., Zaki M.E.A.	Identification of Cyclic Sulfonamides with an N-Arylacetamide Group as $\beta$ -Glucosidase and $\alpha$ -Amylase Inhibitors: Biological Evaluation and Molecular Modeling	2022	Pharmaceuticals	15	1		

1500	Chaudhary A., Hussain A., Ahmad Q.-U.-A., Manzoor M., Tahira S.A., Karita S.	Statistical optimization of alkaline treatment of pomegranate peel waste for bioethanol production	2022	Biomass Conversion and Biorefinery				
1501	Tahir Z., Saeed F., Nosheen F., Ahmed A., Anjum F.M.	Comparative study of nutritional properties and antioxidant activity of raw and fermented (black) garlic	2022	International Journal of Food Properties	25	1	116	127
1502	Sarkar C., Quispe C., Islam M.T., Jamaddar S., Akram M., Munior N., Martorell M., Kumar M., Sharifi-Rad J., Cruz-Martins N.	Plant-derived alkaloids acting on dengue virus and their vectors: From chemistry to pharmacology	2022	Future Microbiology	17	2	143	155
1503	Sial N., Rehman J.U., Saeed S., Ahmad M., Hameed Y., Atif M., Rehman A., Asif R., Ahmed H., Hussain M.S., Khan M.R., Ambreen A., Ambreen A.	Integrative analysis reveals methylenetetrahydrofolate dehydrogenase 1-like as an independent shared diagnostic and prognostic biomarker in five different human cancers	2022	Bioscience Reports	42	1		
1504	Sadaf N., Haider M.Z., Iqbal N., Abualreesh M.H., Alatawi A.	Harnessing the Phytase Production Potential of Soil-Borne Fungi from Wastewater Irrigated Fields Based on Eco-Cultural Optimization under Shake Flask Method	2022	Agriculture (Switzerland)	12	1		

1505	Zeb U., Wang X., Fiaz S., Azizullah A., Shah A.A., Ali S., Rahim F., Ullah H., Leghari U.A., Wang W., Nawaz T.	Novel insights into <i>Pinus</i> species plastids genome through phylogenetic relationships and repeat sequence analysis	2022	PLoS ONE	17	45292		
1506	Shit C., Ghorai G., Xin Q., Gulzar M.	Harmonic Aggregation Operator with Trapezoidal Picture Fuzzy Numbers and Its Application in a Multiple-Attribute Decision-Making Problem	2022	Symmetry	14	1		
1507	Qayyum A., Bhatti I.A., Ashar A., Jilani A., Iqbal J., Mohsin M., Ishaq T., Muhammad S., Wageh S., Dustgeer M.R.	Prewetting Induced Hydrophilicity to Augment Photocatalytic Activity of Nanocalcite @ Polyester Fabric	2022	Polymers	14	2		
1508	Awan M.U., Talib S., Kashuri A., Slimane I., Nonlaopon K., Hamed Y.S.	Some new $(p, q)$ -Dragomir–Agarwal and Iyengar type integral inequalities and their applications	2022	AIMS Mathematics	7	4	5728	5751
1509	Zaheer I.E., Ali S., Saleem M.H., Yousaf H.S., Malik A., Abbas Z., Rizwan M., Abualreesh M.H., Alatawi A., Wang X.	Combined application of zinc and iron-lysine and its effects on morpho-physiological traits, antioxidant capacity and chromium uptake in rapeseed ( <i>Brassica napus</i> L.)	2022	PLoS ONE	17	45292		

1510	Babale S.A., Paracha K.N., Ahmad S., Rahim S.K.A., Yunusa Z., Nasir M., Ghaffar A., Lamkaddem A.	A Recent Approach towards Fluidic Microstrip Devices and Gas Sensors: A Review	2022	Electronics (Switzerland)	11	2		
1511	Chen L., Tahir M., Yasmin S., Muhammad T., Imran M., Liu F.	Flow and Melting Thermal Transfer Enhancement Analysis of Alumina, Titanium Oxide-Based Maxwell Nanofluid Flow Inside Double Rotating Disks with Finite-Element Simulation	2022	CMES - Computer Modeling in Engineering and Sciences	130	3	1771	1788
1512	Tamoor M., Habib S., Bhatti A.R., Butt A.D., Awan A.B., Ahmed E.M.	Designing and Energy Estimation of Photovoltaic Energy Generation System and Prediction of Plant Performance with the Variation of Tilt Angle and Interrow Spacing	2022	Sustainability (Switzerland)	14	2		
1513	Ayesha S., Hanif M.K., Talib R.	Performance Enhancement of Predictive Analytics for Health Informatics Using Dimensionality Reduction Techniques and Fusion Frameworks	2022	IEEE Access	10		753	769
1514	Ashraf M.F., Hou D., Hussain Q., Imran M., Pei J., Ali M., Shehzad A., Anwar M., Noman A., Waseem M., Lin X.	Entailing the Next-Generation Sequencing and Metabolome for Sustainable Agriculture by Improving Plant Tolerance	2022	International Journal of Molecular Sciences	23	2		

1515	Azeem M., Haider M.Z., Javed S., Saleem M.H., Alatawi A.	Drought Stress Amelioration in Maize ( <i>Zea mays L.</i> ) by Inoculation of <i>Bacillus</i> spp. Strains under Sterile Soil Conditions	2022	Agriculture (Switzerland)	12	1		
1516	Aiyashi M.A., Waqas H., Bukhari F.F., Muhammad T.	A thermal model for bio-convection transport of nanofluid due to stretching cylinder with Marangoni boundary conditions	2022	Waves in Random and Complex Media				
1517	Hayat S., Ashraf A., Zubair M., Aslam B., Siddique M.H., Khurshid M., Saqalein M., Khan A.M., Almatroudi A., Naeem Z., Muzammil S.	Biofabrication of ZnO nanoparticles using <i>Acacia arabica</i> leaf extract and their antibiofilm and antioxidant potential against foodborne pathogens	2022	PLoS ONE	17	1 Januray		
1518	Awan M.U., Kashuri A., Nisar K.S., Javed M.Z., Iftikhar S., Kumam P., Chaipunya P.	New fractional identities, associated novel fractional inequalities with applications to means and error estimations for quadrature formulas	2022	Journal of Inequalities and Applications	2022	1		
1519	Tayyab M., Islam W., Noman A., Pang Z., Li S., Lin S., Wenxiong L., Hua Z.	Sugarcane cultivars manipulate rhizosphere bacterial communitiesâ€™ structure and composition of agriculturally important keystone taxa	2022	3 Biotech	12	1		

1520	Iqbal S., Shah M.A., Rasul A., Saadullah M., Tabassum S., Ali S., Zafar M., Muhammad H., Uddin M.S., Batiha G.E.-S., Vargas-De-la-cruz C.	Radioprotective Potential of Nutraceuticals and their Underlying Mechanism of Action	2022	Anti-Cancer Agents in Medicinal Chemistry	22	1	40	52
1521	Khan I.A., Hussain M., Syed S.K., Saadullah M., Alqahtani A.M., Alqahtani T., Aldahish A.A., Asiri S., Zeng L.-H.	Pharmacological Justification for the Medicinal Use of <i>Plumeria rubra</i> Linn. in Cardiovascular Disorders	2022	Molecules	27	1		
1522	Adnan M., Rasul A., Shah M.A., Hussain G., Asrar M., Riaz A., Sarfraz I., Hussain A., Khorsandi K., Lai N.S., Hussain S.M.	Radioprotective Role of Natural Polyphenols: From Sources to Mechanisms	2022	Anti-Cancer Agents in Medicinal Chemistry	22	1	30	39
1523	Ahmad K., Aslam M., Saleem M.H., Ijaz M., Ul-Allah S., Hassan A., El-Sheikh M.A., Adnan M., Ali S.	Genetic diversity and characterization of salt stress tolerance traits in maize ( <i>Zea mays</i> L.) under normal and saline conditions	2022	Pakistan Journal of Botany	54	3	1	11
1524	Jiang H., Lv L., Ahmed T., Jin S., Shahid M., Noman M., Osman H.-E.H., Wang Y., Sun G., Li X., Li B.	Effect of the nanoparticle exposures on the tomato bacterial wilt disease control by modulating the rhizosphere bacterial community	2022	International Journal of Molecular Sciences	23	1		

1525	Nouman M., Niaz B., Saeed F., Arshad M.U., Anjum F.M.	Nutritional and bioactive profile of different parts of <i>Carica papaya L.</i> in relation to thrombocytopenia	2022	International Journal of Food Properties	25	1	24	32
1526	Munir N., Jahangeer M., Bouyahya A., Omari N.E., Ghchime R., Balahbib A., Aboulaghraas S., Mahmood Z., Akram M., Shah S.M.A., Mikolaychik I.N., Derkho M., Rebezov M., Venkidasamy B., Thiruvengadam M., Shariati M.A.	Heavy metal contamination of natural foods is a serious health issue: A review	2022	Sustainability (Switzerland)	14	1		
1527	Rashid S., Jarad F., Jawa T.M.	A study of behaviour for fractional order diabetes model via the nonsingular Kernel	2022	AIMS Mathematics	7	4	5072	5092
1528	Hameed M., Rasul A., Latif S., Rasool M., Abbas G., Siddique M.I., Waqas M.K., Khan I.U., Yousaf A.M., Shah P.A.	Fabrication of moxifloxacin HCl-loaded biodegradable chitosan nanoparticles for potential antibacterial and accelerated cutaneous wound healing efficacy	2022	Journal of Microencapsulation	39	1	37	48
1529	Tijjani H., Matinja A.I., Olatunde A., Zangoma M.H., Mohammed A., Akram M., Adeoye A.O., Lawal H.	In Silico Insight into the Inhibitory Effects of Active Antidiabetic Compounds from Medicinal Plants Against SARS-CoV-2 Replication and Post-translational Modification	2022	Coronaviruses	3	2	70	79

1530	Rashid S., Jarad F., Bayones F.S.	On new computations of the fractional epidemic childhood disease model pertaining to the generalized fractional derivative with nonsingular kernel	2022	AIMS Mathematics	7	3	4552	4573
1531	Perveen S., Parvaiz M., Shahbaz M., Saeed M., Zafar S.	Triacontanol positively influences growth, yield, biochemical attributes and antioxidant enzymes of two linseed ( <i>Linum usitatissimum</i> L.) accessions differing in drought tolerance	2022	Pakistan Journal of Botany	54	3		
1532	Humayun F., Cai Y., Khan A., Farhan S.A., Khan F., Rana U.I., Qamar A.B., Fawad N., Shamas S., Dongqing-Wei	Structure-guided design of multi-epitopes vaccine against variants of concern (VOCs) of SARS-CoV-2 and validation through In silico cloning and immune simulations	2022	Computers in Biology and Medicine	140			
1533	Anjam Q., Hussain F., Imran M., Amin N.	Investigations of thermal and mechanical properties of graphene-silver nanocomposites: a molecular dynamics study	2022	Molecular Simulation	48	3	264	272
1534	Riaz A., Raza M., Thomas D.K.	Hankel determinants for starlike and convex functions associated with sigmoid functions	2022	Forum Mathematicum	34	1	137	156
1535	Rashad M.S., Liu H., Khan S.A.	Numerical simulation for bioconvection of unsteady stagnation point flow of oldroyd-b nanofluid with activation energy and temperature-based thermal conductivity past a stretching disk	2022	CMES - Computer Modeling in Engineering and Sciences	130	1	233	254

1536	Kamran M., Adeel S., Rehman F.-U.	Eco-Friendly Pretreatment and Dyeing of Cotton with Vat Yellow 46	2022	Journal of Natural Fibers	19	14	9765	9775
1537	Azeem F., Zameer R., Rehman Rashid M.A., Rasul I., Ul-Allah S., Siddique M.H., Fiaz S., Raza A., Younas A., Rasool A., Ali M.A., Anwar S., Siddiqui M.H.	Genome-wide analysis of potassium transport genes in <i>Gossypium raimondii</i> suggest a role of GrHAK/KUP/KT8, GrAKT2.1 and GrAKT1.1 in response to abiotic stress	2022	Plant Physiology and Biochemistry	170	110	122	
1538	Cui L., Weng S., Nadeem A.M., Rafique M.Z., Shahzad U.	Exploring the role of renewable energy, urbanization and structural change for environmental sustainability: Comparative analysis for practical implications	2022	Renewable Energy	184	215	224	
1539	Razaq A., Akhter S., Yousaf A., Shuaib U., Ahmad M.	A group theoretic construction of highly nonlinear substitution box and its applications in image encryption	2022	Multimedia Tools and Applications	81	3	4163	4184
1540	Yaqoob Z., Arshad M.S., Imran M., Munir H., Qaisrani T.B., Khalid W., Asghar Z., Suleria H.A.R.	Mechanistic role of astaxanthin derived from shrimp against certain metabolic disorders	2022	Food Science and Nutrition	10	1	12	20
1541	Saeed S., Zahoor A.F., Ahmad S., Akhtar R., Sikandar S.	Reformatsky reaction as a key step in the synthesis of natural products: A review	2022	Synthetic Communications	52	3	317	345

1542	Vivas-Cortez M., Awan M.U., Javed M.Z., Kashuri A., Noor M.A., Noor K.I.	Some new generalized "fractional hermite" hadamard" mercer type integral inequalities and their applications	2022	AIMS Mathematics	7	2	3203	3220
1543	Ashraf R., Rashid S., Jarad F., Althobaiti A.	Numerical solutions of fuzzy equal width models via generalized fuzzy fractional derivative operators	2022	AIMS Mathematics	7	2	2695	2728
1544	Ivascu L., Sarfraz M., Domil A., Bogdan O., Burca V.	Assessment of country institutional factor on sustainable energy target achievement in European Union	2022	Economic Research-Ekonomska Istrazivanja	35	1	3641	3662
1545	Jamil M., Amami M., Ali A., Mahmood K., Amin N.	Numerical modeling of AZTS as buffer layer in CZTS solar cells with back surface field for the improvement of cell performance	2022	Solar Energy	231		41	46
1546	Hawlader M.D.H., Rahman M.L., Nazir A., Ara T., Haque M.M.A., Saha S., Barsha S.Y., Hossian M., Matin K.F., Siddiquea S.R., Rashid	COVID-19 vaccine acceptance in South Asia: a multi-country study	2022	International Journal of Infectious Diseases	114		1	10
1547	Ijaz M.U., Batool M., Ashraf A., Al-Ghanim K.A., Shahzadi S., Samad A., Al-Misned F., Mruthinti S.S., Mahboob S.	A study on the curative effect of nobiletin on paraquat induced toxicity in rat	2022	Journal of King Saud University - Science	34	1		

1548	Ijaz M.U., Jabeen F., Ashraf A., Imran M., Ehsan N., Samad A., Saleemi M.K., Iqbal J.	Evaluation of possible protective role of Chrysin against arsenic-induced nephrotoxicity in rats	2022	Toxin Reviews	41	4	1237	1245
1549	Akram S., Nawaz A., Riaz M.B., Rehman M.	Periodic solutions for two dimensional quartic non-autonomous differential equation	2022	Intelligent Automation and Soft Computing	31	3	1467	1482
1550	Al-Qurashi M., Rashid S., Jarad F., Tahir M., Alsharif A.M.	New computations for the two-mode version of the fractional zakharov-kuznetsov model in plasma fluid by means of the shehu decomposition method	2022	AIMS Mathematics	7	2	2044	2060
1551	Usman M., Balsalobre-Lorente D., Jahanger A., Ahmad P.	Pollution concern during globalization mode in financially resource-rich countries: Do financial development, natural resources, and renewable energy consumption matter?	2022	Renewable Energy	183		90	102
1552	Ratnasari A., Syafiuddin A., Boopathy R., Malik S., Aamer Mehmood M., Amalia R., Dwi Prastyo D., Syamimi Zaidi N.	Advances in pretreatment technology for handling the palm oil mill effluent: Challenges and prospects	2022	Bioresource Technology	344			
1553	Hussain S., Qu S.-W., Bu D., Wang X.-H., Sharif A.B.	A meta-surface loaded, low profile 28Å GHz phased array antenna	2022	International Journal of RF and Microwave Computer-Aided Engineering	32	1		

1554	Huda Z., Mansha A., Asim S., Shahzad A.	Effect of pH on Fluorescence Spectra of Coumarin Derivatives	2022	Journal of Fluorescence	32	1	57	66
1555	Bamagoos A.A., Mallhi Z.I., El-Esawi M.A., Rizwan M., Ahmad A., Hussain A., Alharby H.F., Alharbi B.M., Ali S.	Alleviating lead-induced phytotoxicity and enhancing the phytoremediation of castor bean ( <i>Ricinus communis L.</i> ) by glutathione application: new insights into the mechanisms regulating antioxidants, gas exchange and lead uptake	2022	International Journal of Phytoremediation	24	9	933	944
1556	Al-Qurashi M., Shagari M.S., Rashid S., Hamed Y.S., Mohamed M.S.	Stability of intuitionistic fuzzy set-valued maps and solutions of integral inclusions	2022	AIMS Mathematics	7	1	315	333
1557	Rehman A.U., Amin N., Tahir M.B., Ajaz un Nabi M., Morley N.A., Alzaid M., Amami M., Akhtar M., Arshad M.I.	Evaluation of spectral, optoelectrical, dielectric, magnetic, and morphological properties of RE <sup>3+</sup> (La <sup>3+</sup> , and Ce <sup>3+</sup> ) and Co <sup>2+</sup> co-doped Zn <sub>0.75</sub> Cu <sub>0.25</sub> Fe <sub>2</sub> O <sub>4</sub> ferrites	2022	Materials Chemistry and Physics	275			
1558	Siddiqui W.A., Khalid M., Ashraf A., Shafiq I., Parvez M., Imran M., Irfan A., Hanif M., Khan M.U., Sher F., Ali A.	Antibacterial metal complexes of o-sulfamoylbenzoic acid: Synthesis, characterization, and DFT study	2022	Applied Organometallic Chemistry	36	1		

1559	Piracha M.A., Ashraf M., Shahzad S.M., Imtiaz M., Arif M.S., Rizwan M.S., Aziz A., Tu S., Albasher G., Alkahtani S., Shakoor A.	Alteration in soil arsenic dynamics and toxicity to sunflower ( <i>Helianthus annuus L.</i> ) in response to phosphorus in different textured soils	2022	Chemosphere	287			
1560	Atif M., Naz F., Akhtar J., Imran M., Saleem S., Akram J., Imran M., Ullah M.I.	From Molecular Pathology of COVID 19 to Nigella Sativum as a Treatment Option: Scientific Based Evidence of Its Myth or Reality	2022	Chinese Journal of Integrative Medicine	28	1	88	95
1561	Afzal G., Ahmad H.I., Jamal A., Mustafa G., Kiran S., Hussain R., Anjum S., Rafay M., Ghaffar A., Saeed S.	Bisphenol A mediated histopathological, hemato-biochemical and oxidative stress in rabbits ( <i>Oryctolagus cuniculus</i> )	2022	Toxin Reviews	41	4	1067	1076
1562	Mukhtar A., Mansha A., Asim S., Shahzad A., Bibi S.	Excited State Complexes of Coumarin Derivatives	2022	Journal of Fluorescence	32	1		
1563	Naqvi S.A.A., Islam A., Waseem L.A., Hussain D., Naqvi R.Z., Kazmi S.J.H., Sajjad M., Shaikh S.	Geo-spatially integrated soil quality evaluation: A case of Toba Tek Singh, Pakistan	2022	Pakistan Journal of Botany	54	1		

1564	Khan M.K.I., Ghauri Y.M., Alvi T., Amin U., Khan M.I., Nazir A., Saeed F., Aadil R.M., Nadeem M.T., Babu I., Maan A.A.	Microwave assisted drying and extraction technique; kinetic modelling, energy consumption and influence on antioxidant compounds of fenugreek leaves	2022	Food Science and Technology (Brazil)	42			
1565	Qaiser I.	A comparison of renewable and sustainable energy sector of the South Asian countries: An application of SWOT methodology	2022	Renewable Energy	181		417	425
1566	Adeel S., Razzaq A., Kiran S., Ahmad T., Hassan A., Rehman H.“.	A Comparative Study on Sustainable Dyeing of Silk and Wool with Acid Red 138 Dye	2022	Journal of Natural Fibers	19	14	8181	8190
1567	Wang Z.-G., Raza M., Arif M., Ahmad K.	On the Third and Fourth Hankel Determinants for a Subclass of Analytic Functions	2022	Bulletin of the Malaysian Mathematical Sciences Society	45	1	323	359
1568	Akhtar M.F., Raza S.A., Saleem A., Hamid I., Baig M.M.F.A., Sharif A., Sohail K., Javaid Z., Saleem U., Ra-Sul A.	Appraisal of Anti-Arthritic and Anti-Inflammatory Potential of Folkloric Medicinal Plant Peganum harmala	2022	Endocrine, Metabolic and Immune Disorders - Drug Targets	22	1	49	63
1569	Saeed M., Muneer M., Haq A., Akram N.	Photocatalysis: an effective tool for photodegradation of dyes“a review	2022	Environmental Science and Pollution Research	29	1	293	311

1570	Malik M.Y.H., Binyamin M.A., Hayat S.	Correlation Ability of Degree-Based Topological Indices for Physicochemical Properties of Polycyclic Aromatic Hydrocarbons with Applications	2022	Polycyclic Aromatic Compounds	42	9	6267	6281
1571	Naqvi S.A.R.	99mTc-labeled antibiotics for infection diagnosis: Mechanism, action, and progress	2022	Chemical Biology and Drug Design	99	1	56	74
1572	Waqas H., Manzoor U., Hussain S., Bhatti M.M.	Maxwell time-dependent nanofluid flow over a wedge covered with gyrotactic microorganism: an activation energy process	2022	International Journal of Ambient Energy	43	1	5560	5570
1573	Ansar R., Saqib S., Mukhtar A., Niazi M.B.K., Shahid M., Jahan Z., Kakar S.J., Uzair B., Mubashir M., Ullah S., Khoo K.S., Lim H.R., Show P.L.	Challenges and recent trends with the development of hydrogel fiber for biomedical applications	2022	Chemosphere	287			
1574	Maliyakkal N., Saleem U., Anwar F., Shah M.A., Ahmad B., Umer F., Almoyad M.A.A., Parambi D.G.T., Beeraan A.A., Nath L.R., Aleya L., Mathew B.	Ameliorative effect of ethoxylated chalcone-based MAO-B inhibitor on behavioural predictors of haloperidol-induced Parkinsonism in mice: evidence of its antioxidative role against Parkinsonâ€™s diseases	2022	Environmental Science and Pollution Research	29	5	7271	7282

1575	Zafar R., Shahid K., Wilson L.D., Fahid M., Sartaj M., Waseem W., Saeed Jan M., Zubair M., Irfan A., Ullah S., Sadiq A.	Organotin (IV) complexes with sulphonyl hydrazide moiety. Design, synthesis, characterization, docking studies, cytotoxic and anti-leishmanial activity	2022	Journal of Biomolecular Structure and Dynamics	40	22	12336	12346
1576	Tahir M., Khan M.B., Shahid M., Ahmad I., Khalid U., Akram M., Dawood A., Kamran M.	Metal-tolerant <i>Pantoea</i> sp. WP-5 and organic manures enhanced root exudation and phytostabilization of cadmium in the rhizosphere of maize	2022	Environmental Science and Pollution Research	29	4	6026	6039
1577	Ali S., Abbas Z., Nazir H.Z., Riaz M., Abid M.	A new distribution-free control chart for monitoring process median based on the statistic of the sign test	2022	Journal of Testing and Evaluation	50	1		
1578	Sundhu M., Khosa M.K., Adeel S., Ahmad T.	Microwave-Assisted Eco-friendly Acid Dyeing of Proteinous Fabrics Using Acid Violet 3B Dye	2022	Journal of Natural Fibers	19	14	8065	8074
1579	Samiullah K., Akhtar S., Yasin R., Fazal R.M., Raza M.A., Mahboob S., Al-Ghanim K.A., Al-Misned F.A., Ahmed Z.	A new discovery of a Giraffokeryx skull and associated fossil assemblage of Ruminants from the Middle Miocene deposits of the Siwaliks	2022	Historical Biology	34	5	759	783
1580	Rehman F.-U., Adeel S., Ahmad T., Mateen A., Amin N.	Statistical Optimization of Parameters for Eco-Friendly Dyeing of Cotton Using Direct Red 31 Dye	2022	Journal of Natural Fibers	19	14	7491	7501

1581	Saleem Z., Godman B., Azhar F., Kalungia A.C., Fadare J., Opanga S., Markovic-Pekovic V., Hoxha I., Saeed A., Al-Gethamy M., Haseeb A., Salman M., Khan A.A., Nadeem M.U., Rehman I.U., Qamar M.U., Amir A., Ikram A., Hassali M.A.	Progress on the national action plan of Pakistan on antimicrobial resistance (AMR): a narrative review and the implications	2022	Expert Review of Anti-Infective Therapy	20	1	71	93
1582	Adeel S., Kiran S., Shahid M., Habib S.R., Habib N., Hussaan M.	Ecofriendly application of coconut coir ( <i>Cocos nucifera</i> ) extract for silk dyeing	2022	Environmental Science and Pollution Research	29	1	564	572
1583	Hedayati-Moghadam M., Moezi S.A., Kazemi T., Sami A., Akram M., Zainab R., Khazdair M.R.	The effects of <i>Papaver somniferum</i> (Opium poppy) on health, its controversies and consensus evidence	2022	Toxin Reviews	41	3	1030	1043
1584	Mushtaq S., Raza M., SokÃ³Å, J.	Differential subordination related with exponential functions	2022	Quaestiones Mathematicae	45	6	889	899

1585	Aslam N., Hayat S., Ali T., Waseem M., Siddique M.H., Afzal M., Muzammil A., Naz G., Sarwar A., Muzammil S.	Antiadhesion and antibiofilm potential of fagonia indica from cholistan desert against clinical multidrug resistant bacteria [Potencial de antiadesão e antibiofilme de fagonia indica do deserto do cholistan contra bactérias multirresistentes clínicas]	2022	Brazilian Journal of Biology	82			
1586	Shahzad A., Manzoor A., Wang W., Mahboob A., Kashif M., He M.-G.	Dynamic Characteristics of Strongly Coupled Nonideal Plasmas	2022	Arabian Journal for Science and Engineering	47	1	957	969
1587	Javaid M., Tahir M., Imran M., Baleanu D., Akgül A., Imran M.A.	Unsteady flow of fractional Burgersâ€™ fluid in a rotating annulus region with power law kernel	2022	Alexandria Engineering Journal	61	1	17	27
1588	Naz S., Chu Y.-M.	A unified approach for novel estimates of inequalities via discrete fractional calculus techniques	2022	Alexandria Engineering Journal	61	1	847	854
1589	Aliza K., Shaheen S., Malik M.J., Zulfiqar S., Batool S.A., Ahmad-ur-Rehman M., Javed A.	Linking ostracism with employee negligence behavior: a moderated mediation model [æž'æ-¥ä,žå’ä·¥è¿‡å±èjŒä,äçš„ä...³è¶”ä¼šä,ä,äæœ‰oè°fèŠ,çš„ä,-ä»æ”jåž]	2022	Service Industries Journal	42	45608	872	896

1590	Adeel S., Salman M., Usama M., Rehman F.-U., Ahmad T., Amin N.	Sustainable Isolation and Application of Rose Petals Based Anthocyanin Natural Dye for Coloration of Bio-Mordanted Wool Fabric: Short title: Dyeing of Bio Mordanted Wool With Rose Petal Extract.	2022	Journal of Natural Fibers	19	13	6089	6103
1591	Qian W.-M., Khan M.I., Shah F., Khan M., Chu Y.-M., Khan W.A., Nazeer M.	Mathematical Modeling and MHD Flow of Micropolar Fluid Toward an Exponential Curved Surface: Heat Analysis via Ohmic Heating and Heat Source/Sink	2022	Arabian Journal for Science and Engineering	47	1	867	878
1592	Islam N., Irfan M., Hussain T., Mushtaq M., Khan I.U., Yousaf A.M., Ghori M.U., Shahzad Y.	Piperine phytosomes for bioavailability enhancement of domperidone	2022	Journal of Liposome Research	32	2	172	180
1593	Ahmed U., Raza I., Rana O.F., Hussain S.A.	Aggregated Capability Assessment (AgCA) For CAIQ Enabled Cross-cloud Federation	2022	IEEE Transactions on Services Computing	15	5	2619	2632
1594	Ahmed I., Inam A.B., Belli S., Ahmad J., Khalil W., Jafar M.M.	Effectiveness of aerobic exercise training program on cardio-respiratory fitness and quality of life in patients recovered from COVID-19	2022	European Journal of Physiotherapy	24	6	358	363
1595	Kamal S., Hussain F., Bibi I., Azeem M., Ahmad T., Iqbal H.M.N.	Mutagenesis and Immobilization of ChitB-Protease for Induced De-staining and Goat Skin Dehairing Potentialities	2022	Catalysis Letters	152	1	12	27

1596	Brice Landry K., Tariq S., Malik A., Sufyan M., Ashfaq U.A., Ijaz B., Shahid A.A.	Berberis lyceum and Fumaria indica: in vitro cytotoxicity, antioxidant activity, and in silico screening of their selected phytochemicals as novel hepatitis C virus nonstructural protein 5A inhibitors	2022	Journal of Biomolecular Structure and Dynamics	40	17	7829	7851
1597	Nisar A., Saeed M., Muneer M., Usman M., Khan I.	Synthesis and characterization of ZnO decorated reduced graphene oxide (ZnO-rGO) and evaluation of its photocatalytic activity toward photodegradation of methylene blue	2022	Environmental Science and Pollution Research	29	1	418	430
1598	Mahmood M.H.R., Qayyum M.A., Yaseen F., Farooq T., Farooq Z., Yaseen M., Irfan A., Muddassir K., Zafar M.N., Qamar M.T., Abbasi A.M., Liu H.-Y.	Multivariate Investigation of Toxic and Essential Metals in the Serum from Various Types and Stages of Colorectal Cancer Patients	2022	Biological Trace Element Research	200	1	31	48
1599	Hussain M., Naeem M.N.	Accurate compact solution of fluid-filled FG cylindrical shell inducting fluid term: Frequency analysis	2022	Journal of Sandwich Structures and Materials	24	1	141	156
1600	Daud M.K., Ali S., Variath M.T., Khan M., Jamil M., Ahmad M., Zhu S.J.	Chromium (VI)-Induced Leaf-Based Differential Physiological, Metabolic and Microstructural Changes in Two Transgenic Cotton Cultivars (J208, Z905) and Their Hybrid Line (ZD14)	2022	Journal of Plant Growth Regulation	41	1	391	403

1601	Nazeer M., Khan M.I., Chu Y.-M., Kadry S., Eid M.R.	Mathematical modeling of multiphase flows of third-grade fluid with lubrication effects through an inclined channel: analytical treatment	2022	Journal of Dispersion Science and Technology	43	10	1555	1567
1602	Shah S., Abbas G., Chauhdary Z., Aslam A., Rehman A.U., Khurram H., Noreen S., Chand U.R., Younis M.H., Zulfiqar U.	Antibiotic use: A cross-sectional survey assessing the knowledge, attitudes, and practices amongst students of Punjab, Pakistan	2022	Journal of American College Health	70	8	2499	2504
1603	Noor H., Ikram A., Rathinavel T., Kumarasamy S., Nasir Iqbal M., Bashir Z.	Immunomodulatory and anti-cytokine therapeutic potential of curcumin and its derivatives for treating COVID-19â€“a computational modeling	2022	Journal of Biomolecular Structure and Dynamics	40	13	5769	5784
1604	Adeel S., Rehman F.-U., Khosa M.K., Rajab S., Zia K.M., Zuber M., Batool F.	Eco-Friendly Isolation Of Colorant From Arjun Bark For Dyeing Of Bio-Mordanted Cotton Fabric: Short Title: Dyeing of bio-mordanted cotton with arjun bark colorant	2022	Journal of Natural Fibers	19	12	4684	4695
1605	Muaz K., Riaz M., Oliveira C.A.F.D., Akhtar S., Ali S.W., Nadeem H., Park S., Balasubramanian B.	Aflatoxin M1 in milk and dairy products: global occurrence and potential decontamination strategies	2022	Toxin Reviews	41	2	588	605

1606	Bilal M., Munir H., Khan M.I., Khurshid M., Rasheed T., Rizwan K., Franco M., Iqbal H.M.N.	Gums-based engineered bio-nanostructures for greening the 21st-century biotechnological settings	2022	Critical Reviews in Food Science and Nutrition	62	14	3913	3929
1607	Loudiyi M., Temiz H.T., Sahar A., Haseeb Ahmad M., Boukria O., Hassoun A., AÄt-Kaddour A.	Spectroscopic techniques for monitoring changes in the quality of milk and other dairy products during processing and storage	2022	Critical Reviews in Food Science and Nutrition	62	11	3063	3087
1608	Fakhar A., Gul B., Gurmani A.R., Khan S.M., Ali S., Sultan T., Chaudhary H.J., Rafique M., Rizwan M.	Heavy metal remediation and resistance mechanism of Aeromonas, Bacillus, and Pseudomonas: A review	2022	Critical Reviews in Environmental Science and Technology	52	11	1868	1914
1609	Hussain A., Bourguet-Kondracki M.-L., Hussain F., Rauf A., Ibrahim M., Khalid M., Hussain H., Hussain J., Ali I., Khalil A.A., Alhumaydhi F.A., Khan M., Hussain R., Rengasamy K.R.R.	The potential role of dietary plant ingredients against mammary cancer: a comprehensive review	2022	Critical Reviews in Food Science and Nutrition	62	10	2580	2605
1610	Siddiqui H.M.A., Baby S., Nadeem M.F., Shafiq M.K.	Bounds of Some Degree Based Indices of Lexicographic Product of Some Connected Graphs	2022	Polycyclic Aromatic Compounds	42	5	2568	2580

1611	Aslam M., Balamurali S., Jeyadurga P., Raza M.A.	Monitoring number of non-conforming items based on multiple dependent state repetitive sampling under truncated life tests	2022	Communications in Statistics - Theory and Methods	51	17	5806	5825
1612	Farrukh M., Shahzad I.A., Sajid M., Sheikh M.F., Alam I.	Revisiting the intention to travel framework in the perspective of medical tourism: The role of eWord-of-mouth and destination image	2022	International Journal of Healthcare Management	15	1	28	35
1613	Yusaf A., Usman M., Mansha A., Saeed M., Ahmad M., Siddiq M.	Micellar-enhanced ultrafiltration (MEUF) for removal of rhodamine B (RhB) from aqueous system	2022	Journal of Dispersion Science and Technology	43	3	366	348
1614	Hassan S.M., Sultana B., Hassan S.K., Ahmad A., Yameen M., Ibrahim S.M., Masood N., Iqbal M.	Monitoring of anti-aflatoxigenic activity of medicinal plants against Aspergillus flavus to protect stored layer hens feed	2022	International Journal of Environmental Analytical Chemistry	102	19	7345	7356
1615	Sanawar M., Saleem U., Anwar F., Nazir S., Akhtar M.F., Ahmad B., Ismail T.	Investigation of anti-Parkinson activity of dicyclomineÂ	2022	International Journal of Neuroscience	132	4	338	351
1616	Amin A., Anwar S., Liu X.-H.	Outward foreign direct investment and economic growth in Romania: Evidence from non-linear ARDL approach	2022	International Journal of Finance and Economics	27	1	665	677

1617	Farooqi Z.H., Sultana H., Begum R., Usman M., Ajmal M., Nisar J., Irfan A., Azam M.	Catalytic degradation of malachite green using a crosslinked colloidal polymeric system loaded with silver nanoparticles	2022	International Journal of Environmental Analytical Chemistry	102	16	4104	4120
1618	Naveed R., Bhatti I.A., Adeel S., Ashar A., Sohail I., Khan M.U.H., Masood N., Iqbal M., Nazir A.	Microwave assisted extraction and dyeing of cotton fabric with mixed natural dye from pomegranate rind ( <i>Punica granatum L.</i> ) and turmeric rhizome ( <i>Curcuma longa L.</i> )	2022	Journal of Natural Fibers	19	1	248	255
1619	Maan A.A., Anjum M.A., Khan M.K.I., Nazir A., Saeed F., Afzaal M., Aadil R.M.	Acrylamide Formation and Different Mitigation Strategies during Food Processingâ€“A Review	2022	Food Reviews International	38	1	70	87
1620	Faisal S., Heumann C.	Bootstrap inference for weighted nearest neighbors imputation	2022	Communications in Statistics: Simulation and Computation	51	6	2842	2857